SILENCE IS DEADLY
P&G's Robert Scott says projects fail when five crucial conversations don't happen. **PAGE 28**

STRATEGIES & TACTICS
Our new features section debuts, blending technology and management coverage in one place. **SEE PAGES 5 and 20.**

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Springing Forward Leads to IT Worries

Early start to daylight-saving time forces system evaluations, updates

BY TODD R. WEISS

It isn't quite the Year 2000 scare all over again. But the early switch to daylight-saving time in the U.S. this year is prompting concerns about a potential IT crisis that many companies have yet to resolve.

IT managers who have started addressing the situation said they plan to check all of their systems and applications that rely on time stamps to see whether they can handle the accelerated start of DST. If they can't, the managers added, systems will either need to be updated via software patches or modified so they can continue working properly after the time change takes effect March 11.

> **"Every day, someone brings up a new area we didn't think about that has to be checked, and hopefully there's a patch."**
>
> **RUDY EBISCH,** IT MANAGER

Complicating the efforts is the fact that many IT vendors have yet to disclose whether and how their products might be affected. That has been one of the challenges facing Rudy Ebisch, assistant director of the infrastructure group at a large manufacturer of home and office products that he asked not be identified.

With nine major software platforms to deal with internally, Ebisch said he and his staff have been working for about a month to determine what they need to do to prepare for the DST change. Although some vendors have posted information about the issue on their Web sites, many others have remained mum, so Ebisch is now reaching out to them.

"I have 150 vendors," he said. "They're not going to contact me, so I'll have to contact them. We've got to come up with a comprehensive list."

As part of the internal evaluation, Ebisch's staff has already found more than 100 older, unsupported applications based on versions of Sun Microsystems Inc.'s Java Runtime Environment that need to be patched to properly reflect the time changes. He has designat-

DST Worries, page 37

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CAUGHT IN THE IT PAY SQUEEZE

CIOs are in a tight spot. They need to court IT stars and keep current staffers happy – all without knocking the budget out of whack. Thomas Hoffman explains how they manage.

Story begins on page 20.

Microsoft Slow to Turn On Vista Tools

Missing volume-activation technologies may block rollouts

BY CAROL SLIWA

Unlike most large organizations, the University of Oklahoma plans to deploy Windows Vista on more than one quarter of its 65,000 PCs by the end of this year.

Because of those early migration plans, Dennis Aebersold, the university's CIO, is already well versed in the new operating system's volume activation features. But Aebersold was disappointed to find that Microsoft Corp. has yet to release its Volume Activation Management Tool, which the school needs in order to use a proxy server to centrally activate multiple Vista desktops via a single connection to Microsoft's systems.

To meet Microsoft's requirement that Vista be activated and validated on systems within 30 days of installation, the university also plans to use an internally hosted Key Management Service developed by Microsoft to support automatic activations.

But Matt Singleton, the school's director of IT services, voiced concerns about that method of activation as well. He said Microsoft's KMS offers no user-based authentication, so to enable students who aren't connected to the university's network to activate Vista, the IT department will have to customize its firewall rules to allow only authorized users to access the system running the KMS.

"We believe the new volume-activation process can be beneficial for license compliance purposes," Aebersold said. "But the existing tools need more work and should have been released sooner."

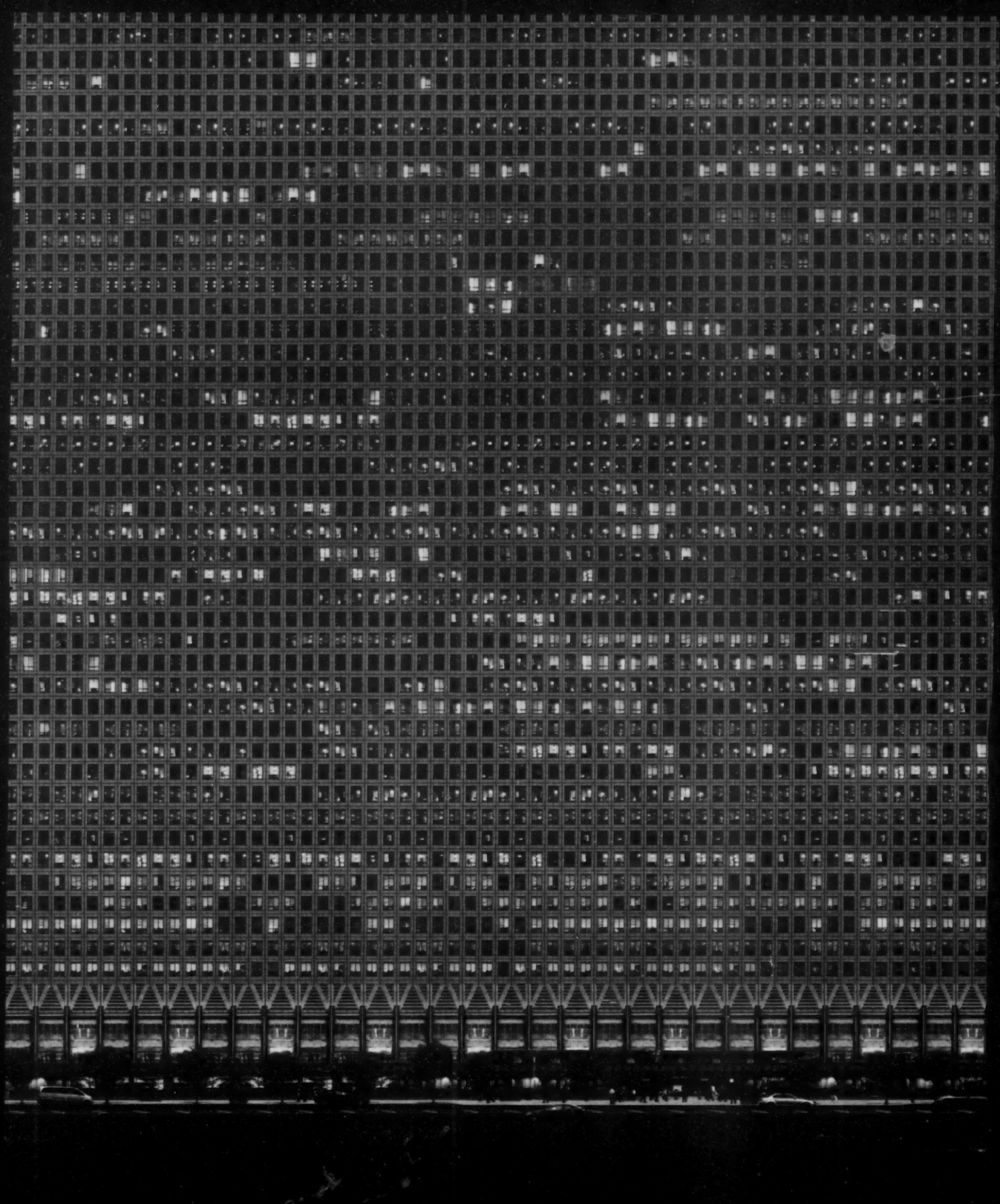
A Microsoft spokeswoman said the Volume Activation

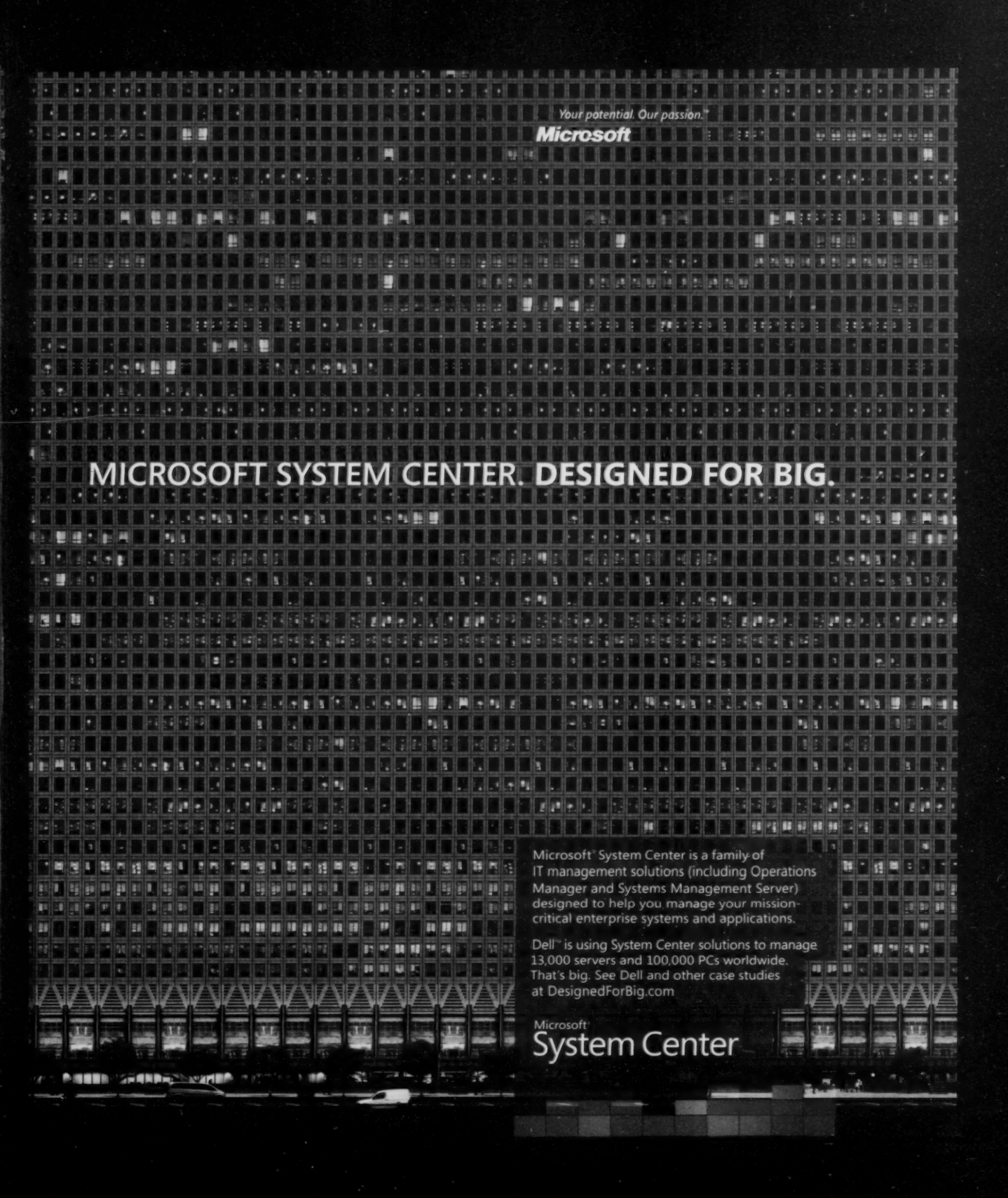
Vista, page 14

INSIDE

Q&A: Office 2007 won't require lots of training, claims a Microsoft exec.

Users, analysts see progress in Project 2007. Page 8

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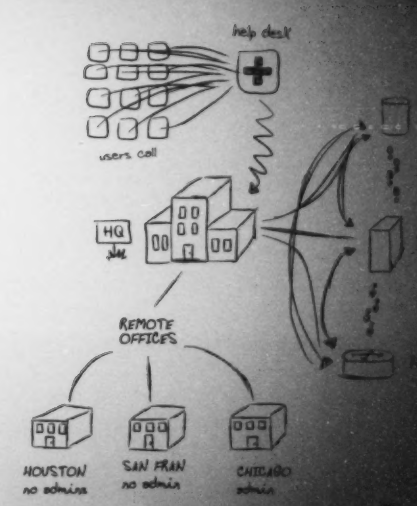

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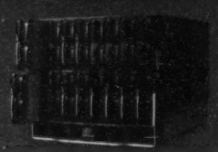

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CONTENTS

02.05.07

NEWS

6 Oracle announces the first major upgrade of its flagship business applications in six years, and company officials vow that migrating won't be as difficult as it was the last time around.

8 Q&A: Microsoft executive Chris Capossela claims that companies won't have to develop big end-user training programs for Office 2007, as some IT managers fear.

8 Microsoft didn't include Project in any of its eight Office 2007 product bundles. But it did add some welcome features to the software, say users and analysts.

12 Service-oriented architectures can provide big financial returns, but IT pros say that SOAs force companies to adopt new ways of thinking.

14 Symantec is still working to resolve business process issues that have weighed down its rollout of a new ERP system, delaying software upgrades for some users and hurting its financial results.

16 IT Infrastructure Library Version 3, due in April, is expected to have new IT process guidelines for security and outsourcing.

17 Global Dispatches: With help from the Business Software Alliance, Microsoft is taking a new approach toward midsize U.K. companies that it suspects of using unlicensed software.

17 Q&A: Vinny Ferrari, CIO at Edward Jones, says a new IP network will enable the financial services firm to converge its data, voice and video traffic.

DEPARTMENTS & RESOURCES

At Deadline Briefs	PAGE 6
News Briefs	PAGES 10, 12
Letters	PAGE 19
IT Careers	PAGE 35
Company Index	PAGE 36
How to Contact CW	PAGE 36
Shark Tank	PAGE 38

STRATEGIES & TACTICS

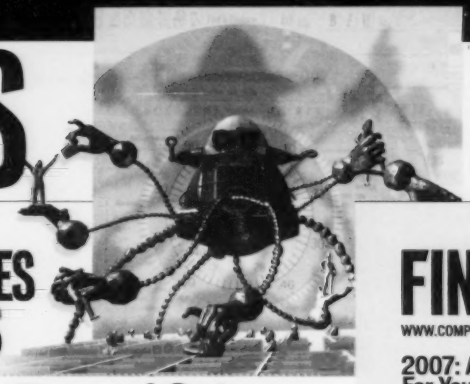

ILLUSTRATION BY JEAN-FRANCOIS PODEVIN

HR Gets a Dose of Science

Human resources departments are using "human capital management" software to add efficiency, rigor and ROI to the art of workforce administration. The software automates tasks related to hiring, training, promoting and scheduling employees. It also helps with succession planning and workforce analysis. **PAGE 24**

20 Caught in the IT Pay Squeeze. While IT leaders are whipping out their checkbooks to court highly coveted job candidates, they're also trying desperately to keep salary costs down while finding ways to stop their top performers from moving to greener monetary pastures.

28 Silence Is Deadly. IT Mentor Robert Scott of Procter & Gamble says the culprit in 85% of project failures is crucial conversations that just don't happen. Deborah Ancona. She talks about how to make peace with your shortcomings and balance your organization.

30 Nobody's Perfect. The myth of the complete leader goads some managers into a futile effort to be all things to all people. The result can be damaging to the manager and the organization, says MIT's

32 Security Manager's Journal. A virus infection points up the dangers of making it all too easy for visitors to get onto the company network, Mathias Thurman finds.

OPINIONS

10 On the Mark: **Mark Hall** wanders around the Demo '07 conference and finds a disturbing trend facing IT and a few cool tools that might help mitigate its effects.

18 Don Tennant recounts a tale of a rogue corporate lawyer who demanded that *Computerworld* remove a story from its Web site because it was posted without a legal release from her company. The corporation later made nice, but there's still the worry that the IT manager who was quoted could face repercussions.

18 Michael H. Hugos heralds the return to prominence of the most pivotal person in the IT profession: the business analyst.

33 Paul Glen muses about how unrealistic expectations of perfection can turn a good manager into a failure.

38 Frankly Speaking: **Frank Hayes** knows all the reasons why IT isn't using USB security keys instead of easily hackable passwords. But those reasons aren't enough, he says.

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2007: A Good Year For Your Career

CAREERS: Columnist Katherine Spencer Lee tells you which IT skills will be in highest demand — and earn the highest salaries.
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The Trouble With Vista

SOFTWARE: It isn't the features you can see in Vista or the lack thereof — it's the priority shift at Microsoft's core, says *Computerworld.com*'s Scot Finnie.
www.computerworld.com/software

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From the Editor in Chief

THIS ISSUE marks our launch of "Strategies & Tactics," a revamped, redesigned and re-energized features section that aims to more accurately mirror the reality of the challenges that confront you and the way you need to address them.

The reality is that your technology and management challenges are inseparable. Just as technology and business issues are inextricably linked in your world, technology and management combine to define your mission as a business enabler. Consequently, we're doing away with our separate Technology and Management sections.

What isn't changing is our focus on coverage that enables you to understand what your peers are doing and how they're doing it. Under the stewardship of award-winning features editor Kathleen Melymuka, Strategies & Tactics will strengthen our quest to facilitate the sharing of experiences and the best practices that are so vital to your mission.

Let Kathy and me know what you think of it, and tell us how we can best mold it into exactly what you need it to be.

– DON TENNANT

AT DEADLINE

Shareholders File Lawsuit Against Dell

A group of Dell Inc. investors filed a lawsuit alleging that the company used illegal accounting methods to hide secret kickback payments that it received from Intel Corp. The suit charged that the payments ensured that Dell used only Intel processors in its PCs. Intel denies the charges. A Dell spokeswoman said the company would not comment on pending litigation. The lawsuit was filed shortly after Kevin Rollins resigned as Dell's CEO. Rollins was replaced by company founder and former CEO Michael Dell.

Governor Proposes Voting Paper Trail

Florida Gov. Charlie Crist announced plans to spend $32.5 million to replace touch-screen e-voting machines used across the state with optical-scanning devices that print out paper records. The move follows a series of disputes over Florida vote counts in local and national elections in recent years.

CA Sales Pass $1B, Profits Fall by $7M

CA Inc. said revenue increased by 4% in its third fiscal quarter, rising to just over $1 billion. But profits decreased by $7 million.

CA BY THE NUMBERS

	REVENUE	
Q3 '07	$1B	$50M
Q3 '06	$965M	$57M

HP Contractor Won't Face Calif. Charges

A California judge has dismissed state charges against an independent contractor in connection with Hewlett-Packard Co.'s efforts to spy on its board members. The charges against Bryan Wagner were dropped because he pleaded guilty to similar federal charges on Jan. 12. Wagner was facing a state trial on charges related to his efforts to trace the source of boardroom leaks to the media.

Oracle Promises Easier Upgrade To E-Business Software Suite

Rolls out first major release in six years, hopes to avoid previous migration woes

BY MARC L. SONGINI
NEW YORK

FOR THE first time in six years, Oracle Corp. is shipping a new version of its flagship E-Business Suite applications, and company officials vowed last week that upgrading won't be as challenging as moving to the last release was.

During a launch event here, Oracle announced the availability of E-Business Suite 12, saying the new software is easier to use than its 11i predecessor and more tightly integrated with the company's Fusion Middleware technology and the various other business applications Oracle has acquired in recent years.

In addition, Oracle said Version 12 has been tested thoroughly in an attempt to avoid the upgrade headaches many users experienced with 11i, which had glitches that required extensive patching and testing when it was first released. John Wookey, senior vice president of applications development at Oracle, called Version 12 "bulletproof" and said the company had focused on ensuring an easy migration from 11i.

A Positive Sign

Jan Wagner, president of the independent Oracle Applications Users Group (OAUG), said Version 12 demonstrates Oracle's commitment to continued investment in its existing applications, even as it moves forward with a plan to combine them into a best-of-breed product line. "It shows users have chosen an application with a future," he said.

> **The cost of upgrading makes us look closer to be sure there is payback.**
>
> DAVID RUDZINSKY, CIO, HOLOGIC INC.

Wagner is the London-based director of financial operations and internal review at NATO, which uses Oracle's 11i financial applications. Having seen previews of Version 12 before the launch, he noted that one of the enhancements is an improved reporting capability using Oracle's Java-based XML Publisher software, which is part of the Fusion Middleware suite.

XML Publisher enables nontechnical users to create their own reports in Microsoft Word or Adobe Acrobat for easier collaboration with co-workers. NATO has strict financial reporting rules, and Wagner said the new reporting functions could make it easier to generate shared reports without the help of a database administrator.

David Rudzinsky, CIO at Hologic Inc., a Bedford, Mass.-based medical instruments maker, said he hopes the quality of the Version 12 software is as good as that of the 5.10 release of E-Business Suite 11i, which his company currently uses. He added that Hologic will put Version 12 through extensive testing before deciding whether undertaking an upgrade would be worthwhile.

"The cost of upgrading makes us look closer to be sure there is payback," Rudzinsky said, adding that Hologic is happy with 11i 5.10 and could wait and then upgrade directly to the best-of-breed Fusion Applications without investing in Version 12. He said he also wants to hear more about Oracle's plans for its Siebel CRM applications and how they fit into the Fusion strategy.

Basheer Khan, a member of the OAUG executive committee, said that Oracle has been touting an overall commitment to product quality and that he doesn't think there should be any fears about Version 12 being buggy.

OAUG members did have some concerns about pricing, said Khan, who is president and CEO of Oracle consulting firm Innowave Technology LLC in Irvine, Calif. "But now Oracle has said there are no upgrade fees," he added. "It's just like another upgrade."

China Martens of the IDG News Service contributed to this story.

Oracle's E-Business Suite 12 apps include:

- A modified graphical user interface that uses technology from Oracle's PeopleSoft Enterprise applications.
- Tools designed to help multinational companies better analyze profitability across their global lines of business.
- Thirty new human resources localization enhancements aimed at compliance with international regulations.
- A role-based HR template that can be used to more easily manage the entire hiring process.

PeopleSoft, J.D. Edwards Applications Get Makeovers

NEW YORK

IN ADDITION TO E-Business Suite 12, Oracle last week announced upgrades of its PeopleSoft Enterprise, Siebel CRM, J.D. Edwards EnterpriseOne and J.D. Edwards World applications – all of which it has gained via acquisitions.

Perhaps most significant was the preview of World A9.1 – the first major release of the green-screen software since 1998. Expected to ship sometime this year, World A9.1 includes four new modules and 1,297 enhancements in areas such as financials, distribution, manufacturing and human resources, according to Oracle.

World, which runs on IBM's AS/400 systems and its System i successors, had languished under original developer J.D. Edwards & Co. and was slated for obsolescence before PeopleSoft Inc. bought J.D. Edwards in 2003. PeopleSoft pledged to support the applications, and Oracle expanded on that commitment when it purchased PeopleSoft two years ago.

The new release has World backers celebrating, said Robert Lieberman, a board member of the Quest International Users Group, which is made up of users of PeopleSoft Enterprise, J.D. Edwards EnterpriseOne and World. Several years ago, World was basically dead, said Lieberman, who is CIO at New Plan Excel Realty Trust Inc. in New York. Now, not only has the software survived, but it has been heavily revamped with a new Web-based user interface, he added.

Oracle President Charles Phillips said at a launch event here that the E-Business Suite and the company's other applications will continue to be enhanced indefinitely. And he reiterated that no customers will be forced off their existing applications after Oracle releases the Fusion Applications best-of-breed suite. Phillips said users will be able to migrate to Fusion, which is scheduled for an initial release next year, on their own timetables.

– MARC L. SONGINI

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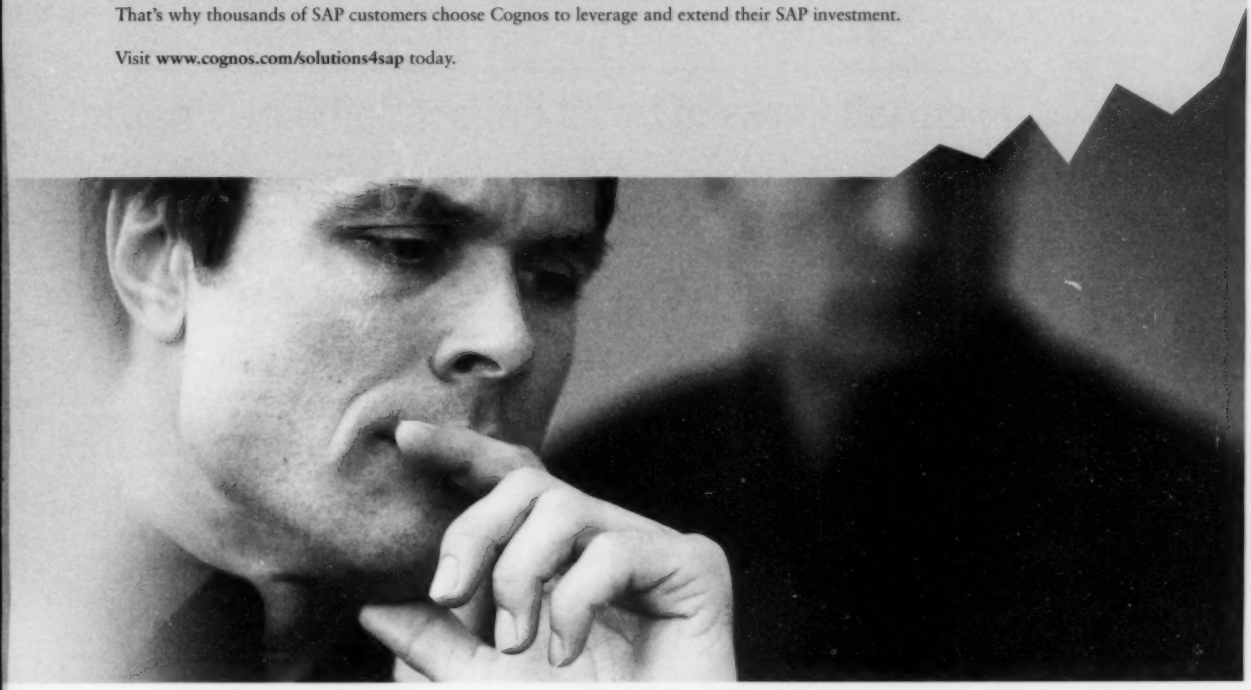

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Office 2007 Training Fears Are Overblown, Microsoft Exec Says

Capossela: New user interface 'far less of a concern' than IT managers think

BY CAROL SLIWA
NEW YORK

Many IT managers have voiced concerns that the dramatically different user interface in Microsoft Corp.'s Office 2007 software will force them to plan migrations more carefully than they have had to in the past, with increased end-user training. But during an interview with Computerworld at last week's Windows Vista and Office 2007 launch event, **Chris Capossela**, *corporate vice president of the product management group in Microsoft's business division, insisted that companies won't have to devise "some big, sophisticated training plan" to roll out the new Office applications. Excerpts follow:*

IT managers say they will have to do more strategic planning for their Office 2007 rollouts because of extra training time that needs to be built in. What would you say to companies that are concerned about that? Well, we certainly didn't do this lightly. We've been working on how to do this as well as we could for the past three years. We started by unveiling the new user interface many, many, many months ago to make sure people understood there was a big change coming. And then we did dramatically more end-user testing than we've done on any other piece of software. . . . The feedback we're getting is that it's far less of a concern than people think it will be initially.

There are two data points that we talk about. No. 1 is, for your average Office user, we see that it takes them about two days of working with the product before they say, "I'll never go back." For your power user — the people who know the ins and outs of Excel, maybe the finance team, or the legal team when it comes to Word — it takes them more like two weeks before they'll say, "Please don't ever take this away."

But that's not two weeks of no productivity. When they launch the product for the first time, we've designed that very first Ribbon so that the vast majority of the common things are right there. It's literally easy to see: How do I change a font? How do I print a file? How do I open a file? How do I save a file?

For those who haven't seen Office 2007 yet, can you describe the Ribbon? The Ribbon takes the place of menus and tool bars. You used to have menus that dropped down and tool bars that stacked up on top of each other. Now, the Ribbon is one strip of icons and galleries that you can choose from to author your documents. The vast majority of people — something like 85% of our beta users — said they were going to be far more productive with [Office] 2007 than [Office] 2003.

The other thing we set out to do was to not put the training burden on the shoulders of the IT staff. We wanted to build the training right into the product and connect that to the Web, where we have really rich training materials. . . . IT doesn't have to roll anything out. If you hit Help within Office, you get access to that training material.

You don't think IT departments need to build in any training, period? They can just rely on your Web site? Absolutely. The best thing for them to do is just take a set of users and do a pilot. Obviously, do it with a small enough group that IT is going to feel comfortable supporting it, and see what kind of support they need for the new user interface. I think people will be very surprised that it's far less jarring than you might think.

So the fears of IT pros about the need for more extensive training are unfounded? I think they're rational to be concerned, and planning is a good thing. But all the data we have shows us that it is something that is much, much simpler than you at first think when you hear that the user interface has changed. ▸

Microsoft Looks to Boost Project Software's Appeal

BY ERIC LAI

The most unsung member of Microsoft Corp.'s Office suite may be Project. Despite a claimed installed base of 20 million users worldwide, the project management software toils in the shadows — so much so that it wasn't included in any of Microsoft's eight official Office 2007 bundles.

But users and analysts said Microsoft has made some welcome technical upgrades in Project 2007, which went into general release last week along with the rest of Office 2007.

For example, the desktop version of Project 2007 adds task drivers and visual cell highlighting, both designed to make it easier for users to spot changes to project schedules and tasks, according to Irwin Rodrigues, Microsoft's business director for Project. The new release also lets users undo multiple changes to a schedule or plan, he said.

"Project 2002 and 2003 offered nothing substantial on the desktop," said Jack Dahlgren, an independent consultant based in Silicon Valley. "With Project 2007, there is finally a reason to upgrade."

Saibal Sen, director of test quality assurance at Genesis Microchip Inc., also applauded the new features but said his company has no plans to upgrade to Project 2007 at this point. "We're comfortable right now," Sen said.

Genesis, a chip design firm in Alviso, Calif., has used Project since 1997 to manage its global software projects and currently has about 150 people using the application. Sen said Project "forced us to think about the structure of a plan, so we don't allocate too many resources or too little."

Performance Gains

Microsoft has also rebuilt Project Server in an attempt to improve its performance, make it friendlier to third-party developers and integrate it with Office 2007's collaboration features. When Project Server was introduced in 2002, its capabilities were so limited that it was a mere "toy," Dahlgren said. The 2003 update fixed some issues, but the software continued to run slowly.

With the new release, "Microsoft appears to have addressed Project Server's performance issues, though the proof will be when large deployments emerge," said IDC analyst Melinda Ballou.

> **"Project 2002 and 2003 offered nothing substantial on the desktop. With Project 2007, there is finally a reason to upgrade."**
>
> **JACK DAHLGREN,** INDEPENDENT CONSULTANT

Project Server 2007 also includes a new .Net application programming interface that provides full Web services connectivity for developers, who can then more easily create third-party applications on top of the Microsoft software, said Gary Chefetz, CEO of MSProjectExperts, a New York-based consulting firm.

Microsoft also released the new Project Portfolio Server 2007 application, based on technology it acquired early last year. That product is designed to compete against higher-end offerings from Hewlett-Packard Co., CA Inc. and other vendors, Ballou said.

Mercedes-Benz USA has used Project and Project Server 2003 to help it accelerate the introduction of new cars in the U.S., said Simon Huang, a technology planning support specialist at the Montvale, N.J.-based company. For example, the automaker has been able to double to 88% the average percentage of spare parts available at its dealers by the time a new model is launched. Project has "helped us make sure the cages arrive at the zoo before the animals," Huang said.

Project has also helped the company's 200 users centralize data in a single repository instead of keeping key information in Excel files on their PCs or in handwritten notes. But Huang said that although he is impressed by Project 2007's new features, his company has yet to start testing the software and currently has no upgrade plans. ▸

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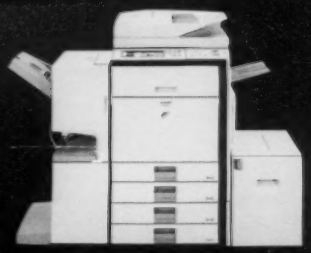

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BRIEFS

Symantec to Acquire Altiris for $830M

Symantec Corp. plans to acquire Altiris Inc., a maker of asset management software for mobile devices and other hardware, in a stock deal valued at $830 million. Symantec will use the Altiris technology in its compliance, backup and security endpoint products. The deal is expected to close in the second quarter of this calendar year.

Vermont Agency Warns of Breach

The Vermont Agency of Human Services has started sending letters to about 70,000 residents warning them of a computer compromise that may have exposed their Social Security numbers and other personal data. The breach, discovered Dec. 8, occurred in a computer running an application used for collecting delinquent child-support payments from noncustodial parents in the state. The state said that the stolen data was not encrypted.

IBM Agrees to Buy Data Mobility Firm

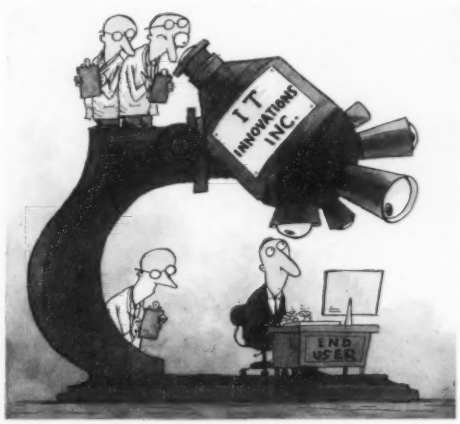
IBM has agreed to buy Softek Storage Solutions Corp. for an undisclosed sum. The deal is expected to close at the end of March. IBM plans to use Softek's data mobility technology to build storage systems for customers of its Global Technology Services unit. IBM and Softek have been partners for more than 10 years. Softek is also a partner of Hewlett-Packard Co.

Altria CIO Named President of SIM

Jim Noble, group vice president and CIO at Altria Group Inc., has been named president of the Society for Information Management. Noble succeeds Stephen Pickett, vice president and CIO at Penske Corp., as head of the Chicago-based professional organization for IT executives. Pickett will remain on SIM's board as the immediate past president and head of the association's SIM Foundation.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL



DAVID CLARK

The End Users Will Be Driving . . .

. . . innovation in IT shops. You've long had to cater to end-user needs, whether it be creating custom reports with mainframe data or giving users the ability to do it themselves on desktop PCs. Well, hang on. It's about to get worse — um, better. That is, the pressure being put on IT to make user experiences better on internal systems will become even worse. Chris Shipley, executive producer of the Demo '07 conference held last week in Palm Desert, Calif., says it's a no-brainer to see that technology has created "the empowered individual" in the consumer market through an array of always-on Web applications and services that can be personalized. But, she adds, "I also see it influencing all aspects of enterprise computing."

BREWIN worries about "loosey-goosey" Web apps.

Bob Brewin, chief technology officer for software at Sun Microsystems Inc., agrees that IT is already shifting to accommodate the personalized world of end users. But he warns CIOs not to go overboard in deploying "loosey-goosey Web front ends" without a rock-solid identity management system or rigorous reliability tests. "Applications for front ends are being created over the weekend with APIs not designed for reliability and security," Brewin says. That means you'll increasingly need to understand not just how to deliver strategic and tactical business tools that match the predilections of individual users, but you'll also need to do so in ways that are secure and reliable. See? It *is* getting worse. Um, better.

Do customized data integration . . .

. . . without any heavy lifting. Despite the availability of everything from middleware to XML, data integration is still a time-consuming effort for IT. As a result, much of it is done by end users on an ad hoc basis. Market research firm IDC estimates that having end users who cut and paste data from one app to another costs companies millions of dollars in lost productivity. Shahar Kaminitz, CEO of Serendipity Technologies Inc. in Yakum, Israel, thinks the WorkLight software his company displayed at Demo can solve much of the problem. WorkLight runs on a Linux server in your data center; it was demonstrated with a Serendipity-built connector to SAP apps that feeds data streams to authorized users. End users get browser plug-ins that let them subscribe to inside- or outside-the-firewall data feeds, and access rights are determined by their network directory profiles. Kaminitz claims that people can easily mix and match data from different systems to create their own data integration views. A Windows version will be released soon, and Kaminitz says connectors to IBM's MQSeries middleware and Oracle Corp.'s Siebel CRM apps are due later this year. Pricing starts at $10 per user per month.

$5.7M Annual productivity loss for 1k workers from moving data between apps, says IDC.

Run-amok users probably need . . .

. . . an autonomic nanny. With users finding more ways to muck around with their systems, you'll need more management controls. Another Demo participant, Rockville, Md.-based Triumfant Inc., says its Resolution Manager tool's analytic engine gathers hundreds of thousands of data points from agent software that's installed on Windows systems. According to CEO John Prisco, Resolution Manager has configuration benchmarks for every machine on a network in its knowledge base, so it can detect PC anomalies and remediate them without human intervention. David Hooks, Triumfant's chief technology officer, says the automatic fixes don't even require end users to reboot their PCs. "It's true autonomous computing," Prisco boasts. Version 4, due this week, polishes up the Web-based user interface for sysadmins and adds support for BMC Software Inc.'s Remedy service management tools. Triumfant sells the technology through managed service providers, which set their own pricing.

250k Data points gathered by Resolution Manager.

Enemies of ink can unite . . .

. . . behind Zink. Another Demo denizen was Zink Imaging LLC, a Waltham, Mass.-based start-up whose name is short for "zero ink," according to CTO Stephen Herchen. And that's just what Zink offers — printed images and photos without any ink. "The magic is in the paper," Herchen says. Zink's patented paper is saturated with millions of cyan, yellow and magenta crystals that melt into a desired image when heated. The company expects that later this year, third-party manufacturers will ship mobile Zink printers, plus a 7-megapixel digital camera with an integrated printer. Herchen says the paper can't be torn and is waterproof, making it ideal for mobile workers. The devices will likely be inexpensive, but you won't want to waste any paper; it will cost 20 cents for a 2x3 photo.

Zink's new handheld printer technology needs no ink.

For all stories go to www.microsoft.com/getthefacts

Microsoft

The Highly Reliable Times

VOLUME 1 – ISSUE 2

Windows Server 2003

WINDOWS SERVER TAKES CHECKERED FLAG OVER LINUX

Tom Nagy for The Highly Reliable Times

THE CONTIDROM, CONTINENTAL AG's storied test track located near Hanover, Germany.

New System Gives Global Automotive Supplier 99.9% Reliability

By MICHAEL BETTENDORF

HANOVER, Jan. 2007 – "We needed rock-solid reliability, and we weren't getting it from our legacy infrastructure," says Paul Schwefer, CIO at Continental AG, one of the world's largest automobile suppliers with over 85,000 employees worldwide. Inadequate management tools made it difficult for Schwefer's team to keep system uptimes at the high levels expected at Continental AG, so a change in platform was necessary.

Initially, a Linux solution was considered. However, after a thorough evaluation, Schwefer's team determined that Linux could not deliver the reliable, predictable environment Continental AG required. Instead, they chose to use Microsoft® Windows Server® 2003.

With key features of Windows Server 2003 such as group policy management, Schwefer found clear advantages over a Linux-based solution. "Windows Server provides a reliable environment with centralized administration and management," said Schwefer, who believes that superior manageability leads to high reliability. "Duplicating this level of service in a Linux-based environment would have been very difficult and more costly," he says.

The decision has proven successful: Since the implementation, Windows Server 2003 has provided 99.9% reliability in a distributed environment for Continental AG. For the full Continental AG case study, plus other case studies and independent research findings on the reliability of Windows Server versus Linux, visit us online at microsoft.com/getthefacts

BREAKING NEWS:

"Windows Server provides a reliable environment with centralized administration and management. Duplicating this level of service in a Linux-based environment would have been very difficult."

– Paul Schwefer, CIO, Continental AG

BREAKING NEWS: Reliability linked to cheerfulness in IT professionals

In a trend with global implications, IT professionals such as Continental AG's Paul Schwefer (pictured at left) show obvious signs of exuberance.

– Continued on Page B3

BRIEFS

IBM Agrees to Resell Lawson Applications

IBM has signed an agreement to resell the S3 and M3 lines of applications from Lawson Software Inc. The deal is a result of efforts by both firms to better target small and midsize business users. The pact extends an earlier agreement under which IBM and Lawson jointly help users adopt service-oriented architecture technologies.

Lenovo Profits Up 23% on Flat Sales

Lenovo Group Ltd. reported a 23% increase in third-quarter profits despite flat revenue. The vendor's worldwide PC shipments increased 8% during its third quarter, which ended Dec. 31.

LENOVO BY THE NUMBERS

	REVENUE	
Q3 '07	$4B	$57.7M
Q3 '06	$4B	$48.9M

BT Group Acquires U.S. Services Firm

BT Group PLC has agreed to acquire International Network Services Inc. as part of a corporate effort to expand its services offerings in the U.S. The deal is valued at about $196 million. The acquisition will add 900 employees to BT's worldwide professional services workforce of about 7,000. INS, which is based in Santa Clara, Calif., will become a wholly owned subsidiary of BT and will be part of the BT Global Services division.

Man Accused of Pirating Software

California police have arrested a 64-year-old man for allegedly selling illegally copied Microsoft Corp. and Adobe Systems Inc. software on the Internet for the past seven years. The alleged criminal sales netted Gad Zamir of Menifee, Calif., an estimated $750,000. Police said Zamir copied and then sold the programs, which included Microsoft's SQL Server Enterprise database and Adobe's Creative Suite 2.

SOA Can Be a Tough Sell

IT often must promote benefits to developers and business users alike

BY HEATHER HAVENSTEIN
SAN DIEGO

MANY COMPANIES are banking on getting substantial financial returns from service-oriented architectures. But shifting to an SOA requires considerable changes in an IT department's focus and its approach to internal operations, according to attendees at a conference here last week.

For example, Marriott International Inc. has identified SOA as one of its three strategic technology pillars, along with business intelligence tools and commercial off-the-shelf software. The Bethesda, Md.-based company is tapping SOA technologies to help shorten software development times and pull more value out of its legacy systems.

But to obtain those kinds of advantages, you need to "turn your organization on its side" and incorporate SOA into thinking enterprisewide, said Steve Wolf, Marriott's senior enterprise architect. "What separates SOA from a minor technology change is the fact that this is a fundamental change in the way we do business," he said during a session at The Open Group LLC's Enterprise Architecture Practitioners Conference.

Demonstrable ROI

John Whitridge, Marriott's vice president of enterprise architecture, said his staff is trying to link the benefits of an SOA to Marriott's overall corporate goals of becoming more agile, bolstering customer service and growing revenue. Whitridge said the enterprise architecture team has also designed a "maturity model" — essentially a road map that outlines SOA principles and guidelines and highlights some of the incremental benefits expected along the way.

Con-way Inc. has seen a substantial return on investment from an SOA approach it has been using since 1998 that started with component-based development, said Maja Tibbling, lead enterprise architect at the San Mateo, Calif.-based freight transportation and logistics company.

The IT department can now change business processes as soon as an alteration is needed instead of having to rewrite code, Tibbling said. In addition, the SOA supports the electronic transmission of data to customs officials in Canada. That has slashed the average time it takes for one of Conway's trucks to pass through customs gates to enter Canada from two to three hours to less than a minute, she said.

But to get Con-way to where it is now, the company's IT architects had to evangelize the SOA concept to software developers and business users alike. Tibbling said her team emphasized to the developers that they could stop doing common, "daily grind" coding. It also set up a services repository with clearly defined data describing the functions of different services.

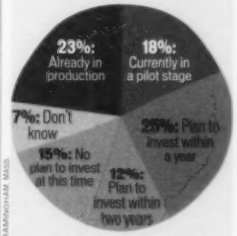
"SOA is not something the business directly cares about," she said. "You have to identify the value that they care about, and that is the value you sell."

Hong Zhang, director and chief architect of emerging technologies at General Motors Corp., said the automaker's first-generation SOA was instituted in 2000 to enable the development of an online vehicle showroom for users in 40 countries. In taking that first step, GM developed an SOA philosophy that the company still uses, Zhang said.

First, GM focuses on its core business functions and how those functions can work as services. Then the company turns its eye toward the technology needed to enable those services. "SOA is really about aligning IT capability with business intent," Zhang said.

Architectural Plans

Has your company invested in an SOA, or does it plan to do so?


23%: Already in production
18%: Currently in a pilot stage
25%: Plan to invest within a year
12%: Plan to invest within two years
15%: No plan to invest at this time
7%: Don't know

SOURCE: IDC, FRAMINGHAM, MASS.

BASE: 447 employees at U.S. companies, surveyed last year on emerging technologies and services

SOA Projects Need to Be Systematic, Exec Says

SAN DIEGO

OVER THE PAST nine years, Con-way Inc.'s SOA has evolved into an event-driven architecture that lets computer systems subscribe to, publish and process "events" – such as the receipt of an order – based on predefined business rules. **Maja Tibbling**, Con-way's lead enterprise architect, discussed the SOA's development in an interview with *Computerworld* at last week's Open Group conference.

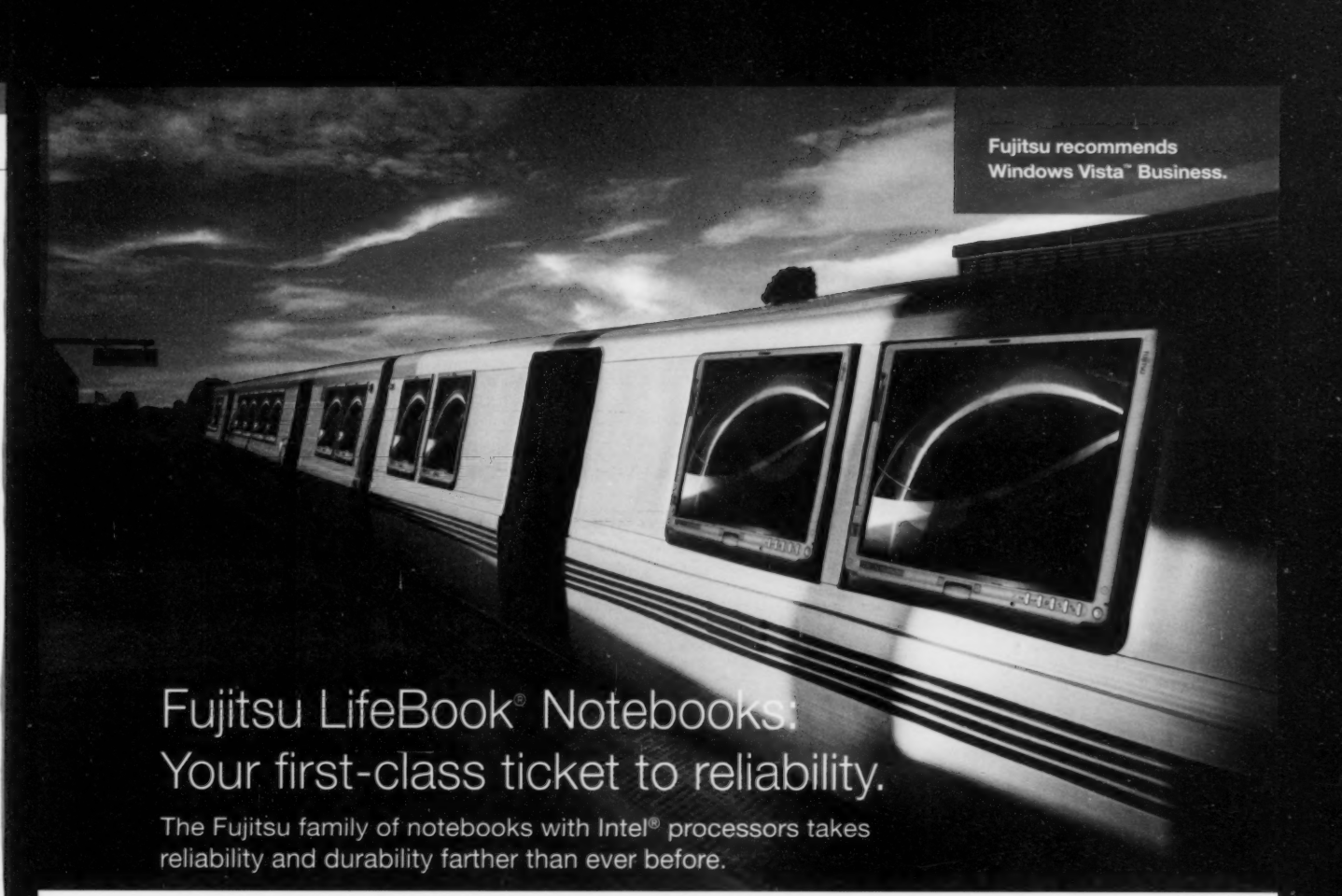
What are some of the major lessons you've learned about developing an SOA, and what would you do differently if you were starting today? One thing we did right was, as soon as we proved the concept on our first pilot, it was understood we were approaching SOA as a systematic implementation. I don't see how it can be successful or valuable if you don't do that. Otherwise, you are in constant struggle with development managers about who will do development.

We didn't define an [ROI] metric upfront, so in our early progress we really had nothing tangible, [and] some business leaders really like to have a number. We had more IT-ish things that showed value, but we couldn't quantify them in raw dollars. The organizational and cultural [changes] are huge – we could have done better with that. We also learned pretty quickly that we need to communicate often and thoroughly. We could have done more of that and better articulated some of the more intangible rules.

Not many companies working on SOAs have gotten to the point of doing complex event-based processing or managing by exceptions. Was that part of your vision from the beginning? It certainly was. We knew we wanted to do that level of complex event correlation and automation of business [processes]. If I see in one part of the country a weather-delay event and a road closure and some other event, then I know I have a problem, and I have to establish a different [trucking] route. Otherwise, those events are disconnected. This is being used very heavily in our collections arena, where you can start monitoring payment patterns and when to start sending customers nice letters to remind them [about payments].

You said that early on, you didn't set specific metrics to measure ROI. How have you shown company executives a return from the SOA? By now, we have clear business examples, [but] upfront you don't have those. You need to sell [users] on the idea, and you need an executive sponsor, preferably the CIO, who really buys into it and knows how to sell it to the business. Upfront, they're going on faith a little bit. A lot of people will [struggle] because they aren't figuring out how to do a systematic implementation. This is where they have to trust it will work eventually and stay with it.

– HEATHER HAVENSTEIN



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ERP Rollout Continues to Weigh Down Symantec

Vendor blames weak earnings on process problems

BY MARC L. SONGINI

Symantec Corp. continues to try to work through a challenging rollout of Oracle Corp.'s ERP applications that has started to affect its bottom line.

In an interview last week, Symantec CIO David Thompson said the problems facing the security and storage management vendor primarily involve internal process changes — not technical glitches. "We were changing the business processes fundamentally and dramatically, and the ERP system was enabling some of those changes," he said.

The rollout started in December 2005, and the new ERP system went live last November, combining what had been separate Oracle-based financial and order management systems at Symantec and the former Veritas Software Corp.

Symantec, which acquired Veritas in July 2005, is running Oracle's E-Business Suite 11i applications on Sun Solaris servers. Using an Oracle Fusion Middleware portal on the front end, the new system was designed to provide a single point of contact for the combined company's customers and business partners, Thompson said.

Temporary Fix

Symantec also revamped its stock-keeping unit (SKU) product identifiers by creating a single set of codes for all of its applications. However, some smaller partners and distributors didn't update their systems to handle the new SKUs in time and were unable to submit purchase orders electronically after the ERP system went live, Thompson said. To cope, Symantec temporarily processed the orders manually while extending the deadline for the partners to use the new SKU system from Dec. 1 to this month.

Symantec also changed the way it sells software licenses, requiring all customers upgrading to new releases to register online and get a special electronic key for activating their applications. As reported previously by *Computerworld*, the new licensing process created confusion and delayed upgrades for some customers, particularly users of Symantec's Backup Exec tool.

Thompson said that led to a spike in call center activity, forcing Symantec to hire more workers to handle the increased volume of phone calls.

Symantec cited the difficulties with the 11i implementation as a contributor to the disappointing financial results that the company reported for its third quarter, which ended Dec. 29. In its Jan. 24 earnings statement, Symantec said its results were below expectations, and it announced plans to trim $200 million in annual costs through layoffs and other restructuring actions.

"Systems changes such as these certainly don't come without issues," Symantec CEO John Thompson said during a conference call after the results were announced. "And we may have had more than our fair share of them with this set of changes, where we incurred higher expenses than planned and lost some revenue opportunities."

CIO DAVID THOMPSON: Process changes, not technical glitches, caused ERP system rollout issues.

But, he added, "we believe the major technical and process issues are now behind us."

James Beer, Symantec's chief financial officer, said during the call that the company will spend a "modest amount of incremental money during the [current] quarter to remediate the handful of issues that remain." Beer said he also anticipates that the fixes will require the use of some of Symantec's internal IT resources.

David Thompson declined to disclose either the cost of the fixes or the ERP project's overall price tag. He said that Symantec is already paring down the number of call center workers it had added in response to the problems.

The company expects a variety of longer-term benefits from the new system, Thompson added. For example, having one set of ERP applications enabled Symantec to shrink its IT infrastructure and reduce its licensing costs with Oracle, he said.

In addition, the system has been linked to Oracle's PeopleSoft Enterprise human resources applications and to Salesforce.com Inc.'s hosted CRM software.

Continued from page 1

Vista

Management Tool, or VAMT, is scheduled to be released in March. She said it contains a version of Microsoft's Multiple Activation Key (MAK) technology that works on a proxy server, plus other tools that the vendor has yet to disclose.

Another missing piece for early corporate adopters of Vista is KMS support for Windows Server 2003. Customers won't be able to run the KMS technology on that operating system until next month, said Cori Hartje, director of Microsoft's Genuine Software Initiative.

For now, that leaves users with a choice of running KMS off a Vista client machine, or a system with a beta copy of the next version of Windows Server, code-named Longhorn. Even Hartje said the latter option isn't "a practical solution."

Michael Silver, an analyst at Gartner Inc., said Microsoft was hoping that users would run KMS off Vista clients until the Longhorn server is available. But IT managers have pushed the software vendor to support Windows Server 2003.

> "There's no way I would even be planning a project like this until all the tools are ready. That all sounds like a whole lot of complexity and asking for problems."
>
> BILL LEWKOWSKI, CIO, METROPOLITAN HEALTH CORP.

"Customers don't want yet another machine somewhere to maintain," Silver said. "They have enough Win2003 servers out there that could handle running this extra service."

Microsoft released Vista to its volume license customers on Nov. 30 and claimed in a marketing campaign that there was no need to wait to deploy the new operating system. But as part of Microsoft's efforts to thwart rampant piracy problems, the operating system will go into a reduced-functionality mode on systems if the activation and validation process isn't completed within the prescribed 30-day window.

"Since most large companies take 12 to 18 months to test and pilot [an operating system], they're probably not inconveniencing too many people" by not having all the volume activation tools ready, Silver said. "Of course, it's not good to inconvenience those that really want to move early," he added.

Users have an additional activation option — MAK for individual computers. Under that approach, each PC has to independently connect to servers at Microsoft via the Internet or a telephone connection to activate Vista. But large companies typically prefer to have their end users connect to internal servers.

Bill Lewkowski, CIO at Metropolitan Health Corp. in Grand Rapids, Mich., said he has no intention of deploying Vista before the first service pack of bug fixes is released. And the delayed volume-activation tools are yet another example of why large users should avoid early deployments, he added.

"There's no way I would even be planning a project like this until all the tools are ready," Lewkowski said. "That all sounds like a whole lot of complexity and asking for problems."

Microsoft itself activated Vista systems for employees by running KMS off a Vista client machine in its IT shop, according to Hartje. She said she and her co-workers simply had to do "the regular installation you have to do with any software." The activation and validation of Vista were "transparent," Hartje said. "I didn't ever know that I'd activated it."

But Barry Libenson, CIO at Ingersoll-Rand Co., called the activation system a "nightmare" that he would "just as soon let others sort out." He doesn't like either the MAK or KMS methods and views the process, as defined by Microsoft, as unfeasible for a company with 30,000 users. "We won't migrate until a more realistic approach is available," he said.

"It's a horrible solution and one of the primary reasons we aren't actively evaluating a Vista rollout," said John LaBrue, an operating system administrator at OGE Energy Corp. in Oklahoma City. "The number of licensed machines we deploy makes this a prospect we don't wish to encounter at this time or at any time in the near future. It's the primary catalyst for us to evaluate alternative technologies."

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ITIL Update to Cover Security, Outsourcing

Users eager to try new version of IT services spec

BY PATRICK THIBODEAU

AFTER the IT department at Raymond James Financial Inc. implemented best practices from the IT Infrastructure Library (ITIL), the number of calls to the company's help desk dropped as much as 25% within 18 months.

Fewer phone calls means IT workers are free for other assignments, said Brian Miller, manager of IT monitoring services and availability management at St. Petersburg, Fla.-based Raymond James. He credited ITIL's set of disciplined processes — such as finding the root cause of a problem — for the drop in help desk calls.

Miller said that by using ITIL's best practices, "you get everybody in every department playing by the same rules," which delivers big benefits in many IT areas, such as change management.

Miller and other IT managers are eager to get their hands on Version 3 of ITIL, which is due in April and will be the first new release since 2000. A lot in IT has changed since Version 2 became available.

Security processes, which users say are lacking in the current ITIL version, will get more attention in the new release. According to Sharon Taylor, ITIL's chief architect, Version 3 will also cover an area that has exploded as a major IT management concern since 2000: outsourcing.

Version 3 will also provide guidance on the related issue of knowledge transfer. In a data center relocation, for example, knowledge transfer means ensuring that new employees or outsourcers know how to run the systems.

Roman Albrecht, an IT manager at DHL Worldwide Network SA/NV's data center in Prague, said he wishes he had had ITIL guidelines for knowledge transfer in 2003 when, as part of a wider facilities consolidation, the company moved its London data center to Prague. "There wasn't any existing process that you could take and [use] — you had to develop it yourself," said Albrecht.

DHL is growing partly by acquisitions, so ITIL helps the delivery company ensure that its global IT operations follow one set of IT processes. "If you are big company and you don't have ITIL, you will be dead very soon because your cost will be too high," said Albrecht. "Without defined, measured processes, you can't optimize — this is a key thing."

ITIL, which was developed by the British government in the 1980s, has become increasingly popular in the U.S., especially following passage of the Sarbanes-Oxley Act in 2002.

Vendors are also jumping into the ITIL services market. Hewlett-Packard Co., for instance, provides ITIL training for DHL employees, and CA Inc. does ITIL consulting work with Sprint Nextel Corp. The vendors are also producing tools intended to help automate ITIL processes. But David Taylor, CIO at the Florida Department of Health, said he looks at some of the products warily.

Cultural Change

Vendors claim that their tools are "based in ITIL" or "ITIL-compatible," Taylor said, but "we have avoided purchasing these products in favor of modifying and federating our own existing systems as we learn the fundamental principles and practices of ITIL."

Taylor said it's important for staffers to internalize how the ITIL framework works. "If you skip this step by initially purchasing a tool that masks some of the process, the culture change needed to sustain the buy-in for service management is compromised," he said.

Users agreed that the major barrier to implementing ITIL is cultural. "The adoption of best practices is met with resistance right upfront, and so buy-in is an evolutionary process," said Kirk Frost, who heads the Princeton, N.J., chapter of the IT Service Management Forum U.S.A. "To even get the finances approved, you get tested at all levels from the senior CIO level down." Frost is implementing ITIL at a financial services firm he declined to identify.

Sprint Nextel invested heavily in ITIL training and also focused on communications, said John Montross, its vice president of managed network operations.

"We found that once employees learn about ITIL, they are eager to implement [it] because they see the value it brings to their work and how it can improve the customer experience," he said.

Getting Buy-in

Tips for getting senior executives to support ITIL:

- Focus on a couple of high-impact incidents and how they might have been avoided by sharing knowledge and adopting ITIL best practices.
- Gather metrics on how ITIL reduces the number of incidents and/or shortens the length of outages.
- Celebrate ITIL successes, and learn to market those success stories.

SOURCE: IT SERVICE MANAGEMENT FORUM'S PRINCETON N.J. CHAPTER

Bob Schwartz, 1951-2007

Robert A. (Bob) Schwartz, former CIO at Panasonic Corporation of North America and president of Panasonic Management Information Technology Co., died suddenly on Jan. 19 at the age of 55.

Schwartz was one of *Computerworld*'s inaugural Premier 100 IT Leader honorees in 2000. In addition, he was a member of *Computerworld*'s Strategic Programs Advisory Board and served as a judge for the *Computerworld* Information Technology Awards Foundation.

"Bob epitomized the best of what can be expected from a senior executive, an IT leader and a friend and adviser to so many in this industry," said Ron Milton, executive vice president of strategic programs at *Computerworld*. "He was important to all of us in so many ways."

Revised Framework Aims to Help CIOs Demonstrate ROI

SUGGESTIONS for Version 3 of the IT Infrastructure Library came from thousands of people around the globe. But the person responsible for the end product is **Sharon Taylor**, who is ITIL's chief architect, as well as president of Aspect Group Inc., a consulting firm in Ottawa, Ontario. In an interview with *Computerworld*, Taylor explained how Version 3 will help CIOs.

What's prompting the need for ITIL Version 3? The landscape of IT, and indeed IT service management, changes at a very rapid pace. When Version 2 was released, some of the landscape was different than it is today. An example is that the use of outsourced partnerships was not the rule of the day during that time.

How will Version 3 help with outsourcing? [It will] deal with the strategies about outsourcing: When is it right to consider, in what form should that take, through to the design of how you actually execute an [outsourcing] decision or strategy.

How do you know that you're giving good advice? The content of ITIL itself has not been developed in a vacuum by any means. Our philosophy has been to use the experience and the best practices of what's going on in the industry, in a diverse client base.

How many people contribute to this? We're talking upward of thousands.

What else is new in Version 3? One of the gaps that evolved was that the focus on service management became very operationally based. The big change that we're introducing is to take a broader viewpoint of what service management encompasses, [including] strategic considerations, the design implications, the cultural and organizational change implications. So the major shift is to introduce service management from a life-cycle perspective, as opposed to just a process-based view.

What's going to be the takeaway for CIOs? One of the things that is most difficult to do with the current version of ITIL is develop a solid business case for return on investment. IT organizations face competition through outsourcing service providers; they are being required to operate and manage themselves as businesses and produce value. From a CIO perspective, the biggest benefit that this [new] version of ITIL brings is that we have added guidance that allows senior executives to be able to demonstrate, measure and produce a return on investment for supporting a unified best-practice framework for service management. It helps them to demonstrate why investing in good service practices gives them a solid return on investment.

– PATRICK THIBODEAU

GLOBAL DISPATCHES An International IT News Digest

Microsoft Takes New Tack on License Checks

LONDON

MICROSOFT CORP. plans to take a tougher stance with midsize companies in the U.K. that it suspects are using unlicensed software. The new approach could culminate in threats of legal action by the Business Software Alliance.

Ram Dhaliwal, Microsoft's licensing programs manager in the U.K., said last week that the software vendor hopes the BSA's involvement will help "spark off the engagement" with customers targeted as possible users of improperly licensed or counterfeit products.

Previously, Microsoft contacted such companies by phone or e-mail and asked that it be allowed to audit their software.

Now, Dhaliwal said, if it doesn't receive a response from a customer within 14 days, Microsoft will send a series of three "escalation" letters in successive weeks, with the last two letters warning that the case could be turned over to the BSA for legal action.

The program is aimed at companies with about 250 PCs and is being implemented only in the U.K. at this point, according to Dhaliwal.

■ JEREMY KIRK, IDG NEWS SERVICE

Workforce in India Will Be Accenture's Largest

BANGALORE, INDIA

ACCENTURE LTD.'S top executive said at a press conference here last week that the IT services firm will employ more workers in India than it does in any other country by the end of August.

William Green, Accenture's chairman and CEO, said the company projects that it will have about 35,000 employees in India as of Aug. 31, a 52% increase from last August's level. That would top the size of Accenture's U.S. workforce, which is expected to stand at about 30,000 people at that point, he said.

Accenture's Indian operations currently provide IT and business process outsourcing services, and Green said that the company plans to train staffers in India to do new work in business consulting and other areas.

Green added that he doesn't expect the workforces in other countries to overtake India's for at least 10 years. "There will not be another phenomenon like India," he said.

■ JOHN RIBEIRO, IDG NEWS SERVICE

GLOBAL FACT

14.2M

The number of new PCs shipped in Japan last year, down 3.3% from the amount shipped in 2005.

SOURCE: GARTNER INC.

Kenya Launches Effort To Build PCs Locally

NAIROBI, KENYA

WITH HELP from Lenovo Group Ltd. and two other hardware vendors, the Kenyan government is launching an effort to promote the assembly of low-cost PCs that could be sold to users in that country and other African nations.

Lenovo, along with Sahara Computers Pty. and Mustek Ltd.'s Mecer unit, which are based in South Africa, will build the first 150 systems by Wednesday, a Kenyan official said at a kickoff ceremony last month. A group of universities in Kenya will offer courses to train local workers to assemble the PCs.

The initial funding for the project totals about $300,000 (U.S.), according to the Kenyan government. The PCs will be based on Intel Celeron processors and are expected to be priced at about $450.

■ MICHAEL MALAKATA, IDG NEWS SERVICE

Compiled by Mike Bucken.

Briefly Noted

PSA Peugeot Citroën **has signed a multiyear contract to deploy Novell Inc.'s SUSE Linux software on up to 20,000 desktop systems and 2,500 servers. Novell, which announced the contract with Paris-based Peugeot Citroën last week, didn't disclose the financial details or a timetable for the rollout.**

■ JOHN BLAU, IDG NEWS SERVICE

Unilever Group **has signed a tentative deal to outsource its data center operations to Hewlett-Packard Co. in the Americas region, as well as Asia, Africa, the Middle East and Turkey. The companies said they hope to reach a definitive agreement by midyear. HP would also take over server and database management and application hosting for Unilever.**

■ PATRICK THIBODEAU, COMPUTERWORLD

The German Federal Armed Forces **have agreed to install more of SAP AG's software as part of an ongoing IT modernization project. The new contract, which covers more than 140,000 end users, calls for the military to deploy the vendor's SAP for Defense & Security vertical-industry software and NetWeaver middleware.**

■ JOHN BLAU, IDG NEWS SERVICE

Satellite Network Stops Paying Off for Edward Jones

CIO says new IP network will boost performance, support more apps

BY MATT HAMBLEN

AT&T Inc. last week announced a five-year, $54 million contract to develop an IP network supporting voice, video and data traffic for Edward D. Jones & Co.'s 10,000 branch offices. The project will provide the St. Louis-based financial services firm with a virtual private network based on Multiprotocol Label Switching technology. In an interview with Computerworld, *Edward Jones CIO* **Vinny Ferrari** *discussed the new Global Branch Network, which will replace a satellite network that the company has used since the 1980s. Excerpts follow:*

Why are you moving to the new network? We've outgrown our satellite technology, and it's important for us to have a new conduit because we really need to provide the best tools to our financial advisers. AT&T's terrestrial lines enable us to do that. Satellite communications were limited in terms of bandwidth.

How is the project working out? We have 10,000 branch offices, with one financial adviser per office. Already, using land lines has dramatically improved response times, so the network will not only allow more applications but [also] help them run faster. The response time on Web-based interactions is down by 75%.

Currently, we have 4,000 offices converted. We started with AT&T about six months ago, and the due date for the conversion of all 10,000 offices is July 31. We're pleased with AT&T that it has met an aggressive time schedule.

What do you plan to do in terms of converging your network traffic? Our goal is to converge data, voice and video into one network. Previously, we moved video over satellite and then to TV monitors from the satellite. Through these new lines to the desktop, we can converge [everything]. Satellite is really great for streaming video but not for two-way data communications, such as Internet traffic.

Were you getting many complaints from your users about the satellite network? We have an anonymous electronic suggestion box, and our financial advisers and branch office administrators gave us constant feedback. It was dramatic stuff, yes. There was recognition across the firm that a change was needed. And now they're giving us great feedback on the new network.

So how did the satellite network come about in the first place? It was the right decision going to satellite back in 1988, and it's the right decision coming off satellite in 2006 and 2007. It was very reliable, with two uplinks — in Tempe, Ariz., and St. Louis. About 80% of the time, the uplinks came from Tempe, where there is usually beautiful weather. With bad weather, you'd have interference. But the main thing now is that satellite is not great for the scale of the Internet.

Will this result in any cost savings compared to your satellite costs? Moving from satellite to terrestrial will be more expensive. But new, more sophisticated tools will be delivered, and the new network plays a critical role in their delivery. The cost is well worth it. ▸

DON TENNANT

The Rogue Lawyer

IT ALL BEGAN innocently enough with a story that was hardly an eyebrow-raiser. The article, "John Hancock reaps big benefits with new SRM software," was written by *Computerworld*'s Lucas Mearian and posted on our Web site on Jan. 17. It was the type of story we cover all the time — a user story that explains a technology problem encountered by IT pros and what they did to solve it.

DON TENNANT is editor in chief of *Computerworld*. Contact him at **don_tennant@computerworld.com**.

In this case, the problem was storage system bottlenecks and blackouts, and it was solved with a storage resource management appliance. The implementation was successful, so everybody at the company should have felt good about it, right?

Well, that's what I thought, until we received a phone call on Jan. 25 from one of John Hancock's lawyers. The lawyer demanded that we remove the article from our site because we had failed to obtain a legal release from John Hancock to post it. No, I'm not kidding.

I explained to the lawyer that that's not how reporting the news works. I asked her whether, in her capacity as a consumer of news, she wants news stories to be vetted by the parties covered in the articles before she's allowed to read them. I could almost hear her rolling her eyes.

"This isn't about world peace," she said sarcastically. "This isn't Darfur."

She lightened up long enough to ask me to remove the article as a professional courtesy. When I asked her to give me a reason that would substantiate such a request, she claimed that the article contained confidential information that she couldn't specify because it was, well, confidential.

I declined, and she got belligerent, declaring that she would be sending us a cease-and-desist letter. When she asked me for our mailing address, I gave it to her, and I asked her where she was located as a lead-in to getting her name and contact information.

"The John Hancock Tower," she snapped. "Look for us." And she hung up.

The whole thing was sort of surreal. Mearian, who had spoken to the lawyer before the call was escalated to me, wrote about the episode in his blog. He noted the irony of a company named after one of the founding fathers having such a lack of appreciation for freedom of the press.

A reporter from the *Boston Herald* picked up on the story, and I told him I presumed that John Hancock wanted the article to disappear because it included a candid account from an IT manager about how the storage bottlenecks caused some finger-pointing between the applications and infrastructure groups at the company.

My concern was that John Hancock would come down hard on the IT manager who had the courage to speak openly with us about the challenges he faced and how he overcame them. That sort of experience-sharing is the lifeblood of the IT profession, and it's *Computerworld*'s raison d'être.

In the end, however, we found that John Hancock wasn't the unreasonable behemoth it appeared to be. We were informed that the lawyer who had contacted us did so without authorization, and on Jan. 29, the company issued this statement:

"John Hancock respects the right and the need for media outlets to report the news. We regret that *Computerworld* was contacted and any unauthorized statements that may have been made to the publication."

Hopefully, the company also respects the need for IT professionals to speak freely to the media, barring the disclosure of truly confidential information. At its best, John Hancock will demonstrate that stymieing the trade press with overly restrictive corporate communications policies does nothing but sink a valuable resource in an ocean of timidity. ▸

Don Tennant

MICHAEL H. HUGOS

The Rise of The Business Analyst — Again

WHEN I got into the IT business years ago, I thought the business analyst was the most pivotal person in the whole profession. That was the person who was the bridge between business and technology, the one who could see and understand both sides and whose goal was to apply technology to support business initiatives that would help the company grow revenue or shrink operating costs.

Over the last 20 years, we lost sight of that, as the technology focus began to shift away from IT and toward the business users. The PC dethroned the mainframe and minicomputer. Local-area networks enabled whole companies to run on PCs and servers. The chips powering PCs got more and more powerful, allowing the software to get more full-featured.

MICHAEL H. HUGOS is a principal at the Center for Systems Innovation and a speaker. He is a member of the 2006 *Computerworld* Premier 100 IT Leaders class. His books include *CIO Best Practices: Enabling Strategic Value with Information Technology* (John Wiley & Sons, 2007). He can be reached at **www.MichaelHugos.com**.

Then the Internet hit the big time, and for the past 10 years, we've been exploring the many things you can do when you combine people and computers in real-time networks via the Web. But by now, the newness has worn off, and we are back to thinking about that old concern of how to use this stuff to make money. That's where the business analyst comes in once more.

A lot of IT functions have been outsourced, including data center operations, programming and the help desk. The one function that doesn't seem to lend itself to outsourcing is business analysis. To effectively look out for their best interests, companies have to analyze their specific chal-

lenges and find unique responses to them. If they play the "me too" game of simply doing what everyone else is doing, they will reap no real competitive advantage. Sure, a company can bring in consultants to help and to train its analysts, but it cannot get consistently good results if it outsources the whole analysis function. Why? Because an analyst needs to really understand the company he is working with, and the best way to do that is to live there and be part of it.

I often hear that companies have not developed their business analysis capabilities because they believe that analysts use soft skills that anyone can exercise without much training. I beg to differ.

I was once asked to start up and run a group of business analysts for a company that already had a 100-person IT department. As part of that job, I had to define the specific skills my analysts should have and then put in place a training and career advancement program that would develop those skills. This gave me cause to think carefully about the skills that analysts need and how to develop them.

Here's what I found:

- Business analysts must be able to facilitate joint application-design sessions that involve groups composed of both business and technical people. They need to actively include everyone in the sessions and encourage people to contribute their ideas.
- They need to do process mapping. This is often a very good way to focus the conversations of a group in a design session and provide a big-picture context in which to place people's ideas.
- They need to apply data modeling to organize the data flowing through the business processes they are designing. By this I mean logical data modeling (not the creation of physical data models in fourth normal form).

Once analysts have facilitated group design sessions, created process flow diagrams and organized the relevant data into a logical data model, they must pull this all together and create the user interface for the system that will drive the activities in the process flow and handle the data in the data model. This is where analysis turns into synthesis, and where the design of any new system emerges. And as if all that weren't enough, good analysts must also be skilled at system testing, user training and even project management.

Soft skills? These are some of the hardest skills to master in the whole IT profession. And companies need good business analysts now more than ever if they are going to thrive in our fast-changing global economy.

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www.computerworld.com/columns

READERS' LETTERS

Readers' Views on Techies' Language Skills, H-1B Visas and Free Markets

THERE'S NO doubt the e-mail writer to whom Don Tennant refers in his editorial "A Wake-up Call" [Opinions, Jan. 15] is not the most erudite, but the messages I've seen authored by H-1B visa holders show that neither citizens nor immigrant workers have a lock on poor language skills. Besides, e-mail has become the medium of poorly written missives.

To judge an individual's merits based on a few lines of text smacks of snobbery. And to use this to establish a thesis on quality and the assumption that American workers don't embody it is overly simplistic. In fact, it's been my experience that most technical people are generally poor writers.

The writer of that e-mail voiced perfectly valid concerns about the H-1B situation, regardless of the fact that he expressed himself without stylistic class.

I work with numerous H-1B visa holders, and several things are clear: Their jobs could be filled by U.S. workers of equal skill; the system is abused by employers who are looking for indentured servants; visa holders are often champing at the bit to get out from under the H-1B yoke; and many visa requests come from former H-1B visa holders who have acquired their green cards through the sponsoring company.

I'm not an isolationist. In fact, I'm a free marketer who believes in open and fair competition. The H-1B system, however, is anticompetitive and creates a class of employee that is ripe for abuse by corporations whose only motivation is trimming the bottom line.

Instead of the current H-1B visa, a more open immigration system needs to be established that allows people with valuable skills the opportunity to easily establish legal residence in order to compete fairly in the employment marketplace. Until such a thing happens, the existing format will be used by organizations for the import of cheap labor.

Phil Steinschneider
Senior software engineer, Sterling, Va.

I OFTEN HAVE to communicate with what Tennant calls "the brightest and best from all over the world," and while I can at least understand what the guy he quoted was saying, I can't say the same for them. I also don't buy the argument that communication skills are the reason American IT workers are losing their jobs to foreign workers. My company has outsourced many of its IT jobs. Our own management has told us that this is not about our performance, but about the money.

Craig Temby
Howell, Mich.

AS MORE companies hire more and more H-1B visa holders, displacing Americans from their jobs, the brightest in future generations will not go into high-tech and engineering careers. Then the colleges and universities will discontinue computer and engineering studies because of a lack of enrollment.

The H-1B program was supposed to bring in individuals with extraordinary skills and advanced educations, not average workers.

Howard Eichenwald
Consultant, Overland Park, Kan.

I AM AGAINST the H-1B visa program, but we need to let go of the misperception that somehow we would be better off if only we could keep foreigners from taking our jobs. This is not a zero-sum game. If the work we perform has value, it increases the need for that work. Bringing in more foreign workers will likely increase the demand, both foreign and domestic. But we should accept all the immigrant professionals who can find a job, and let them come and go as they please.

I am an embedded-software consultant, self-employed by choice. As I struggle to build a business, I am envious of the income levels of H-1B engineers doing the same work. But I hope one day to be sufficiently successful to become the one looking for talent. If that time comes, I will be looking for performance and value, not origin.

If wages are the compelling factor, then we should be demanding increases in H-1B allotments rather than watching our jobs get outsourced to India, Singapore and China, where competent technical professionals are available for 10 cents on the dollar. Rather than watch as technical jobs migrate to foreign countries, we should bring the best and the brightest from the rest of the world here. If they stay, we win. If they leave, most will become key figures in their own nations.

David H. Lynch Jr.
Owner, DLA Systems, dhlii@dlasys.net, Lititz, Pa.

I DO NOT believe we have a tech worker shortage in this country, but that doesn't mean I believe in absolute protectionism, either. Someone needs to bring a realistic proposal to the debate. We cannot shut our borders, but we should not tolerate the status quo, either.

I worked for a year in England through a program that is similar to our H-1B status in the U.S. The company for which I worked needed to show that no local talent was available to fill the post. To do that, they carefully crafted the job description so that no one else could possibly fit the bill. The problem with that arrangement – and others like it – is that I worked for a relatively low wage, and my work status was tied specifically to that company.

Similarly, H-1B visas must be sponsored by companies. Companies practically own their H-1B personnel, since they cannot jump to a better-paid position without first having the other company sponsor their visa. If we untied the permit from the company and allowed these visa holders free run in the market as we do our own citizens, we would quickly find that there is no low-cost incentive for companies to hire foreign workers.

Ben Weinberger
Fort Lauderdale, Fla.

I AGREE WITH Tennant. Excellence in all we do is required to stay at the top of our game in IT. After 20 years in IT, I still avail myself of technical training and the continuous pursuit of knowledge. I know I have more to offer than an outsourced alternative, but I also know that I have to know more and offer more to remain competitive. I think disgruntled IT people refuse to admit that they have to sharpen their skills to remain competitive. Salespeople have always known this. It's high time IT people got competitive instead of licking their wounds.

Marcia Wilson
Sparks, Nev.

COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

STRATEGIES & TACTICS

Inside 02.05.07

HR Gets a Dose of Science. Human resources departments are using "human capital management" software to ease administrative tasks. **PAGE 24**

IT Mentor: Silence Is Deadly **PAGE 28**

Leadership Q&A: MIT's Deborah Ancona **PAGE 30**

Security Manager's Journal PAGE 32

Opinion: Paul Glen **PAGE 33**

CAUGHT IN THE IT PAY SQUEEZE

CIOs struggle to reward top performers as they pay out big bucks to land niche skills.

ANTHONY FREEDA

By Thomas Hoffman

TIM RAMSAY faced numerous challenges in his search for a security manager for the University of Miami late last year. For starters, the tight IT labor market in southern Florida was forcing the university to compete with international banks, travel companies and other organizations for the same scarce talent.

Moreover, although Ramsay's ideal candidate was a seasoned security chief who could set a vision and create policies for the university, he realized after the first handful of interviews that it would be difficult to find someone who had all the qualities he was looking for.

But Ramsay also faced a more far-reaching problem. Once the Coral Gables, Fla.-based university extended a nearly six-figure offer to a candidate, Ramsay would need kid gloves to handle the reaction from IT staffers, who would know the salary range based on the job title and grade. "There's no easy way to be competitive with new hires without running the risk of creating an internal morale problem with incumbents in the same job class," says Ramsay, the university's associate vice president of IT.

Ramsay is referring to the compensation squeeze play that he and other IT leaders are currently facing. As demand for certain types of IT competencies has heated up, particularly for niche skills in areas such as industry-specific ERP technologies or upper-echelon .Net development, companies have had to pump up their offers to snare the right people.

At the same time, CIOs are under enormous pressure from senior management to hold down their IT labor costs. Executive uncertainty about the economy has kept overall salaries down, and the increased use

Continued on page 22

IBM
_INFRASTRUCTURE LOG
_DAY 34: This indecision is sinking the business. How do we move to a service oriented architecture? Where do we start? Can we reuse what we have?
_Infrastructure quicksand!! We waited too long. I'd throw Gil my tie, but it's a clip-on.
_DAY 37: A lifeline: IBM WebSphere middleware! It's already helped thousands of customers build an SOA. Adapters give us a standardized approach to integrating apps from SAP, Oracle and others. And it lets us reuse what we have, saving time and money.
_Oh, great. There's sand in my yogurt.
WebSphere
Download the reuse and connectivity kit at:
IBM.COM/TAKEBACKCONTROL/CONNECT

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Continued from page 20

of lower-paid IT workers overseas has helped depress wages for developers, help desk technicians and other technologists whose jobs are vulnerable to outsourcing, notes Craig Symons, an analyst at Cambridge, Mass.-based Forrester Research Inc.

In fact, the average salary budget increase for IT employees has barely kept up with inflation. In 2006, the average IT salary rose just 3.1%, according to *Computerworld*'s latest salary survey. And Gartner Inc. forecasts that 2007 IT staff budgets will rise just 3.5%, says analyst Diane Berry.

So while IT leaders are whipping out their checkbooks to court coveted candidates, they're also trying desperately to find ways to keep their top performers from moving to greener monetary pastures.

"You constantly have to worry about it," says Dan Demeter, CIO at Korn/Ferry International, a Los Angeles-based executive recruitment firm. "If you bring someone in at the higher end, you don't want [IT staffers] wondering why a new person has been brought on for so much money."

New Worries

This situation is different from that of the recent past in several ways. It's more complex than the frenzied IT labor market during the dot-com boom, when hysterical demand lifted wages for many IT workers across the board. And though employers in the late 1990s were also looking for specialized IT skills, today's companies are looking for IT workers with combinations of specialized skills, says Jim Lanzalotto, vice president of strategy and marketing at Yoh Services LLC, a Philadelphia-based provider of talent and outsourcing services.

"It used to be 'Go find me a CRM specialist,' " says Lanzalotto. "Now it's 'Go find me a CRM specialist who has expertise in the pharmaceutical industry.' " Such candidates don't come cheap.

Polishing Hidden Gems

MOST IT LEADERS do whatever is possible to hold on to superstar workers such as ace programmers or top project managers. But smart managers know that there's also a less-visible class of performer they don't want to overlook – network managers, help desk experts and other IT infrastructure staffers whose behind-the-scenes roles are critical to ensuring an organization's day-to-day operations. Keeping both sets of workers happy is tricky, but the results are worth the effort.

"Managers who do this eloquently will have a better-performing organization," says Diane Berry, an analyst at Gartner Inc.

For starters, smart CIOs make the point that an employee's value is about talent and commitment, not job title. Russ Finney, CIO at Tokyo Electron America eschews labels like "A Team." He makes sure that his IT managers are communicating frequently with their direct reports to see that all IT staffers are engaged and challenged. "Philosophically, everybody can be an A Team player if you can just get them into their sweet spot," he says.

Eric Goldfarb, CIO at Atlanta-based BearingPoint Inc., also resists labels. Instead, he uses training and new job assignments to keep all employees growing. "I've seen 'A' players turn into 'B' players and vice versa," says Goldfarb. "[Great performance] starts with the CIO setting a vision for the IT organization and people working toward meeting that vision."

IT executives at the University of Miami use similar methods, particularly to reward workers who are looking to improve their own skills. "Those people who are showing initiative and are adding value take a lot of pride in being given additional responsibilities," says Tim Ramsay, associate vice president of IT at the university. "They see it as an endorsement of what they've accomplished."

– THOMAS HOFFMAN

but it's still considered a perk, and Finney tries to distribute the trips equitably. "We try not to limit this to a select set of people," he says.

In some cases, retaining critical performers requires creativity. Last year, Mohegan Sun CIO Dan Garrow was in danger of losing one of his top programmers, an employee with extensive gaming systems skills who was well-versed in the casino company's quality assurance and testing requirements.

The programmer moved to Spain because his fiancée took a job there, so Garrow hired him as a contractor. "He knows everybody here and knows his way around the organization," says Garrow. "He can write and submit code from overseas."

Despite this kind of flexibility, retaining IT talent has been difficult for Garrow. The previous CEO, who left the company last summer after an 11-year run, believed that all company employees should receive standard 4% annual pay raises. That made it more difficult to reward individual IT performers.

To get a better handle on compensation, Mohegan Sun recently hired consulting firm Mercer Oliver Wyman to conduct an assessment of employee pay. Once that is completed, Garrow expects that the salaries of various workers — including IT staffers — will be adjusted to reflect the market. Also, the new CEO "is more amenable to performance raises" than the previous chief was, says Garrow.

Dollars Deliver

Innovative tactics aside, many say compensation is still king. At Irvine, Calif.-based Hyundai Information Service North America LLC, the turnover rate is 15%, says Rich Hoffman, president and CEO of the IT arm of Hyundai Motor America. He estimates that 80% of those who have left recently have departed for higher salaries.

Despite these losses, Hoffman is learning how to leverage the dynamics of an increasingly bifurcated IT labor market. As a starting point, he makes sure he has taken care of his most valued employees and up-and-comers by keeping their compensation apace with market wages and bonuses.

Then, less strategic IT activities at Hyundai are outsourced or sent offshore, and most of the savings are redirected into the salaries of the company's IT workers. "Since organizations don't do as much IT work in-house anymore, there's a lot more flexibility" with this approach, says Hoffman.

For CIOs stuck in the salary squeeze, there's no silver bullet. On-the-job challenges, stretch assignments, innovative environments, career development opportunities and creative approaches to work/life balance are all important, but ultimately, especially for top performers, money still talks.

"We've done about all we can in terms of benefits and perks for those higher-level individuals," says Rebecca Wettemann, an analyst at Nucleus Research Inc. in Wellesley, Mass. "But benefits and perks don't fill gas tanks."

"There's no easy way to be competitive with new hires without running the risk of creating an internal morale problem."

TIM RAMSAY, ASSOCIATE VICE PRESIDENT OF IT, UNIVERSITY OF MIAMI

But the pressure to keep the existing workforce happy is also intense because it's getting harder for CIOs to find — or replace — certain skills. In the IT organization at Tokyo Electron America Inc. in Austin, for example, turnover is still relatively low, at 5% to 7%. "But the 5% to 7% that leave is very painful, because these are very important skills that are hard to replace," says CIO Russ Finney.

So Finney uses various nonmonetary techniques to keep his staff engaged. "We're putting a lot of energy into making sure our people feel good about their jobs," he says. One method is stretch assignments, or projects that challenge them. This might include taking someone who has worked on a component of an ERP implementation and placing him in charge of an entire ERP project for one of the company's seven U.S. operating companies, says Finney.

Finney has also made an effort to give as many of his IT staffers as possible an opportunity to travel to Japan to visit Tokyo Electron's headquarters. There has to be a business rationale for the trip, of course,

Pushing Back

Here are some tactics for surviving the squeeze:

- Identify your top IT performers and those you want to retain for the foreseeable future.
- Tie compensation plans to business results. Compensation drives behavior and results.
- Check the market regularly to determine how much money certain skills are commanding, and adjust individual compensation accordingly.
- Customize perks and benefits to meet the work/life needs of individual employees.
- Develop a farm system for grooming next-generation leaders.
- Create multiple career paths for IT workers, aided by rotational work assignments.
- Implement nonmonetary recognition programs. They don't cost much, but they're priceless in making people feel valued.

– THOMAS HOFFMAN

_INFRASTRUCTURE LOG

_DAY 33: Our information is siloed. Unmanageable. People can't access the latest info to make decisions. Gil's resorted to giving everyone access to everything all at once.

_Monitors now outnumber humans 18 to 1.

_DAY 36: It's clear to me. We need an IBM Information On Demand middleware solution. Info will be liberated from the silos—available when we need it, whatever the format. Accurate and in context. Now we can make smarter decisions and deliver real business value.

_Access is a beautiful thing.

Information Management

See innovative IBM Info Management solutions in action:
IBM.COM/**TAKEBACKCONTROL**/INFO

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HR Gets a Dose of Science

By Sue Hildreth

HUMAN RESOURCES DEPARTMENTS ARE EMBRACING SOFTWARE THAT BRINGS EFFICIENCY, RIGOR AND ROI TO THE ART OF MANAGING PEOPLE

IMAGINE PLACING an electronic order to hire an employee the same way a factory manager uses ERP software to order more parts for the assembly line. That's roughly what's happening at Oregon Health & Science University (OHSU).

And the payoff is significant: The university is filling job openings two weeks faster than it once did and saving at least $1,500 per job now that it's using Oracle Corp.'s iRecruitment software.

The iRecruitment application, part of Oracle's E-Business Human Resources Management System (HRMS) suite, enables managers to electronically request a new employee and process applications. The software handles most of the time-consuming administrative work, including routing requisition forms to the appropriate managers and posting the job on the Web site. "We wanted to be able to open a job requisition in the morning and have qualified candidates in the afternoon," says Joe Tonn, director of HR information services at the university.

In fact, OHSU now has access to applicants within minutes of a job opening being posted to the university's Web site, and it fills those jobs in just four weeks instead of six or more. The university also recently added Oracle's Manager Self Service module for logging changes to employee status — such as promotions or use of family leave — and uses the Oracle Employee Self Service application for benefits management. Tonn expects to add software for performance reviews, succession planning and learning management over the next couple of years.

Large and midsize organizations such as OHSU are increasingly turning to these new types of employee management applications — commonly called human capital management (HCM) or workforce optimization software — to automate HR processes that used to be done manually, on paper or by e-mail. HCM applications can be purchased either as individual, niche products or as integrated suites containing most or all of the various HCM functions. Companies such as Oracle, Kronos Inc., Kenexa Corp. and Lawson Software Inc. have been buying or building technologies to create broad HCM suites.

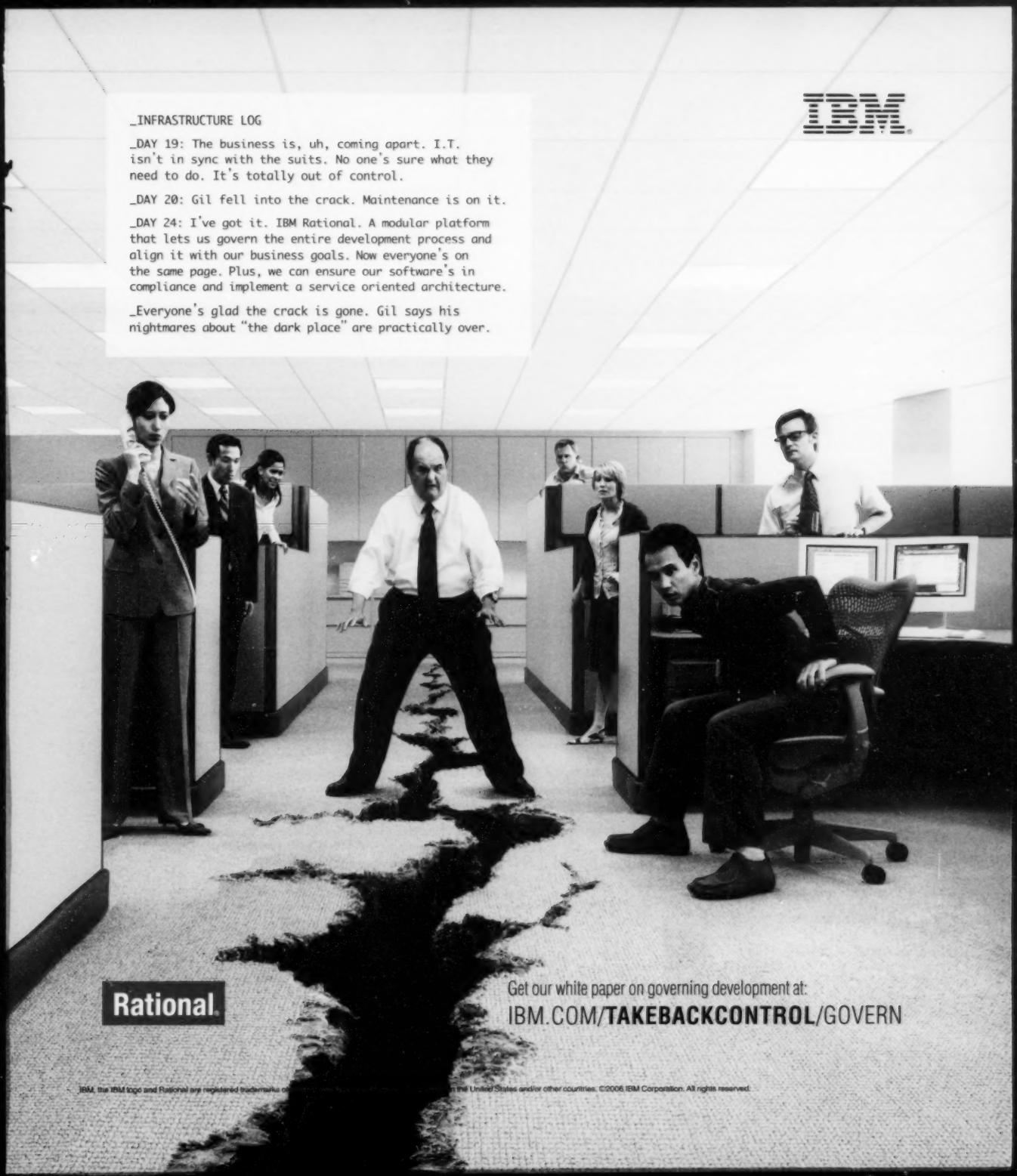
"Human capital management covers the whole discipline of managing the workforce, bringing them in and tracking them over time," says Christa Degnan Manning, an analyst at AMR Research Inc. in Boston. AMR forecasts a 10% compound annual growth rate through 2010 for the $6 billion HCM market.

Much of the market growth can be attributed to the upcoming retirement of baby boomers, which will shrink the pool of available workers, says IDC analyst Albert Pang. "Companies need to better automate their systems in order to identify employees they want to retain and then provide a career path for them," he says.

HCM tools automate time-consuming administrative tasks and provide analysis for strategic decision-making. Specifically,

Continued on page 26

ILLUSTRATION BY JEAN-FRANCOIS PODEVIN


_INFRASTRUCTURE LOG
_DAY 19: The business is, uh, coming apart. I.T. isn't in sync with the suits. No one's sure what they need to do. It's totally out of control.
_DAY 20: Gil fell into the crack. Maintenance is on it.
_DAY 24: I've got it. IBM Rational. A modular platform that lets us govern the entire development process and align it with our business goals. Now everyone's on the same page. Plus, we can ensure our software's in compliance and implement a service oriented architecture.
_Everyone's glad the crack is gone. Gil says his nightmares about "the dark place" are practically over.
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Continued from page 24

HCM applications can handle the following tasks:

HIRING. Sony Computer Entertainment America Inc. uses recruitment software from WorkforceLogic to automate its process for hiring contract workers.

Sally Buchanan, director of human resources at Sony Computer Entertainment, says the software is particularly useful for ensuring that hiring managers understand and comply with the legal distinctions between contract and salaried employees.

"When they requisition a contractor, they must answer a series of questions through the WorkforceLogic interface, and the application renders a recommendation on whether the position is best filled by a contractor or by someone on the payroll," says Buchanan.

TRACKING PERFORMANCE AND PROMOTIONS. Employee performance management, career development and succession planning are all functions that can be automated with HCM applications. For example, Tyco International Ltd. uses Kenexa's CareerTracker to track employee performance and promotions. The software, which is configured with Tyco's performance standards and rating system, can plot employee performance on a graph to identify the top performers both in terms of job achievement and in meeting Tyco's leadership behavior standards.

Using the database of employee credentials and expertise, Tyco can also locate the best people to fill key job openings and analyze what types of training they'll need. "We can identify who we have and how they fit," says Shaun Zitting, director of organizational development at the Princeton, N.J.-based company.

According to AMR's Manning, most corporate executives like having a tool that helps them evaluate and promote people on purely objective criteria.

"They know it's not based on, 'I like Joe because we go to lunch every day.' It brings some real science to the process and allows you to not only identify your top performers but [also to] know why they're top performers," she says.

Career development and succession planning applications have also become more important as baby boomers retire and organizations have to find qualified replacements. Succession planning isn't just for CEOs and other top executives anymore. "It's starting to cascade down into the organization as the collecting and associating of [employee] information become easier," Manning says.

Managers can associate key characteristics with specific jobs and analyze the traits of successful employees. Employees themselves can use the data to see their most likely career paths in an organization.

Compensation management, another function often found in HCM tools, enables organizations to create incentive programs, tie compensation to performance goals, and analyze pay packages and trends.

SCHEDULING. Scheduling work shifts for 27,000 health care professionals in a wide range of specialties and at multiple locations is a formidable task. But at Banner Health, a large hospital system based in Phoenix, the implementation of the Kronos scheduling application has automated much of the process.

Banner uses the Kronos application to log hours worked and to plan schedules, says Kathy Schultz, director of IT at Banner Health. Integrating data about hours worked with future scheduling helps to ensure that employees aren't expected to work if they've just put in a lot of overtime. "What [hours] you work isn't always what you were scheduled to work," notes Schultz. "Having scheduling integrated with live time-and-attendance information is extremely critical."

TRAINING. At pharmaceutical giant Novartis AG, sales and research and development professionals are expected to take various classes to keep them up to date on the latest products and trends. With about 550 Web-based and classroom-based courses available, the old paper- and Excel-based process for administering training had become cumbersome and time-consuming.

But by using Saba Software Inc.'s Learning Suite, administrative work has been reduced by 50%, according to John Talanca, head of learning technologies at Novartis. "It's allowed the administrators to be more efficient and take on other work. In the past, they would spend hours and hours each day managing this," says Talanca.

ANALYSIS AND FORECASTING. HR applications often contain a variety of employee data, including salaries, experience, education, performance reviews and benefits selections. Analysis tools can enable HR managers to leverage that data for strategic decision-making. They can, for instance, track employee performance against company benchmarks, forecast the skills that will be needed for future projects, analyze salary increases by geographic region or professional field, or predict trends in benefits selection and costs.

For example, OHSU's Tonn hopes to eventually use analysis tools to better evaluate recruiting practices. Honing the school's recruiting campaigns could produce better candidates as well as lower costs.

"We can see how many applications a particular source gives us, and whether we ever hire applicants from that source. If we do hire them, do they become successful employees? Running an ad in *The Oregonian* might produce a thousand applications. But if we didn't hire any of them, then that was a whole lot of administrative work that didn't bear any fruit."

Integrating HCM

Individually, the various HCM tools are helpful, but to get optimal value, they need to be integrated, with the data stored in a common repository, Manning says. But that isn't easy, because most HCM products started as stand-alone applications. Lately, however, a flurry of acquisitions by larger HCM and ERP vendors, such as Oracle, Kenexa and SAP AG, has resulted in more integrated HCM suites.

That's good news for users, but sometimes integration can't be achieved just by buying a suite. Organizational issues may be in the way, such as if the various HCM functions are split between different corporate departments. Or if the HCM suite has to be implemented across multiple business units running disparate ERP and HR applications.

At Novartis, for example, Talanca's e-learning department is separate from HR. Talanca would like to see the HR department adopt Saba's performance management software so that more HR data would be available for analysis, but it's out of his control. "There's no reason why someone's learning plan and transcript shouldn't be part of their performance record, in one system," he says.

Tyco has a different integration challenge. The data on its 250,000 employees in 72 countries is divided among 25 different HR applications and hundreds of payroll systems. Integrating all these systems with the Kenexa CareerTracker would have been too difficult, so Tyco and Kenexa created an employee self-registration version of the software, which allows workers to enter their own data into the system.

That information has been helpful to Tyco managers in staffing 300 new positions. "We can see what talent we have and move them across the business units," says Zitting. "[The software] is invaluable in this context."

Organizations such as Tyco are increasingly viewing employees as assets, to be acquired, cultivated and deployed strategically — not unlike product inventory or IT systems. The very name of the software category, *human capital management*, conveys the notion that a worker is an investment that should be optimized.

"Managers want to see how the people they hired are doing," says Manning. "It's taking the organization's people assets and leveraging them to reach business goals, such as increased sales, profitability and customer satisfaction."

Hildreth is a freelance writer specializing in enterprise software trends. She can be reached at Sue.Hildreth@comcast.net.

SaaS Appeal

The software-as-a-service model is proving especially popular for new categories of enterprise applications, such as human capital management. In fact, the majority of HCM vendors offer their applications as services via subscriptions as well as through traditional licensing.

SaaS is a popular way to deliver these new applications in part because companies are less likely to have a formal, centralized set of processes for tasks such as managing human resources and are therefore more open to adopting the software vendor's best practices, according to AMR analyst Christa Degnan Manning. In addition, SaaS offers a less resource-intensive method for implementing a brand-new application, particularly for far-flung multinational companies.

IT executives may want consistency, and they believe that software can provide it. But they don't want to deploy and maintain different versions in different parts of the world, says Manning. "SaaS vendors don't get paid unless you actually use the software," she says. "So they want to help you get as many people as possible up and running on the application."

– SUE HILDRETH

THE PROBLEMS

Companies have a hodgepodge of human resources systems, so employee records quickly fall out of sync across the various systems.

HR processes still rely too much on paper, even though self-service, automated applications exist.

HR systems haven't kept pace with business needs.

Many companies can't get an accurate picture of employee head count or personnel costs.

SOURCE: COMPUTER RESEARCH INC.

_INFRASTRUCTURE LOG
_DAY 44: This lack of productivity is out of control. What we're using isn't working. Gil's had enough. He moved everyone into one cubicle. A "collaboration" cubicle. We need a better idea.
_DAY 46: I'm going with IBM Lotus® Notes® and Domino.® It's more than e-mail; it's an open platform designed for collaboration. It has proven security features and productivity enhancers like document sharing and custom app development. And it's flexible enough to integrate across multiple platforms, including J2EE™ and Linux.®
_OK, who sat on my lunch?
IBM
Lotus.
Download the Lotus Notes & Domino demo at:
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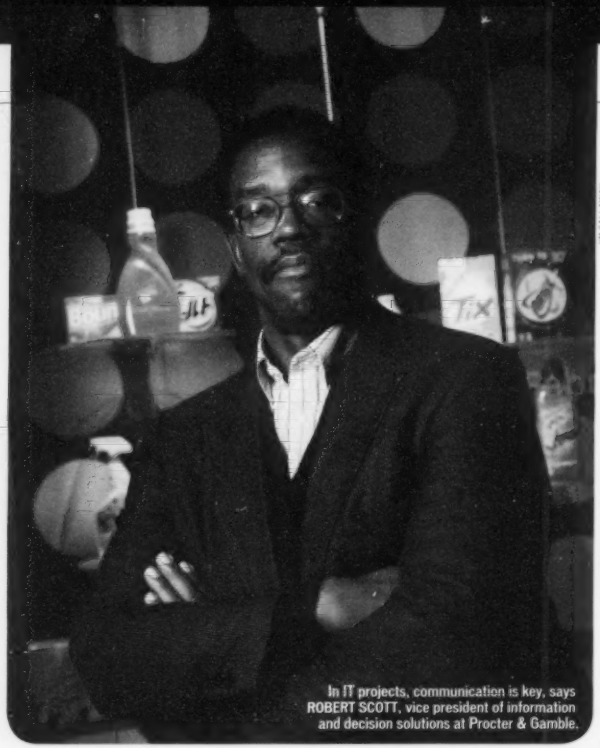

In IT projects, communication is key, says ROBERT SCOTT, vice president of information and decision solutions at Procter & Gamble.

SILENCE IS DEADLY

IT MENTOR **Having five critical conversations can mean the difference between success and failure in IT projects. By Robert Scott**

IN A WEB 2.0 WORLD, IT is dramatically redefining business models. Whether providing new ways to reach customers, establishing radically new business-to-business relationships, cutting new-product time to market in half, or enhancing worker productivity and global collaboration, IT is the core enabler.

These days, however, less than 30% of corporate initiatives come in on time, on budget and on spec. The rest either fail outright or are significantly disappointing. So while much has been done to improve new processes, tools, techniques and governance concepts in the past 20 years, there is surprisingly little progress to show for it.

This point was dramatically emphasized recently by a major study called "Silence Fails: The Five Crucial Conversations for Flawless Execution" (see box at right).

"Silence Fails" was conducted by The Concours Group and VitalSmarts LC to identify the causes of IT project failure. This worldwide study involved more than 1,000 executives and project management professionals representing a cross-section of major corporations. It included analysis of more than 2,200 projects. The Procter & Gamble Co. was one of 40 companies participating. Our goal was to determine how we could take our project management competency to the next level.

What we learned was alarming. The research suggests that the culprit in 85% of project failures is silence. The study showed that there is a definable set of project communication problems that are far more common than most senior leaders realize. An estimated 90% of project managers routinely encounter one or more of five critical problems in the course of a project, but the killer is the silence that follows. Initiatives are derailed when people are unwilling or unable to have conversations about the problems they see. When one or more of the five crucial conversations doesn't happen, problems fester, work-arounds proliferate, politics prevail, and failure becomes almost inevitable.

But there is hope. This research and our experience tell us that the light at the end of the tunnel doesn't have to be an oncoming train. The study discovered that when people are able to discuss these core problems effectively, projects come back on course. This finding was hugely important for P&G because we manage more than 1,500 IT projects each year, more than 60% of which are global. The high-stakes nature of our projects means we have to get this right.

For example, over the past seven years, we've worked to reorganize our IT services. We've developed IT partnerships that have enabled us to outsource commodity work and move some of it to low-cost locations. In the process, we have dramatically cut unit costs and improved service quality. But these were complicated projects involving dozens of high-stakes variables, personnel issues, varied cultures and difficult cross-company communications. We've seen each of the five problem areas come into play, and the single most important factor in helping ensure success has been communication.

We established teams upfront to set clear expectations with leadership, team members, and our partner companies and their employees. And then we worked diligently to ensure that whenever expectations changed, were met or were not met, we communicated that to all involved.

We put in place core people, backed by rewards and requirements, to ensure that we discussed issues head-on and quickly. And we shared data — good and bad — as soon as possible. The team members learned to work through issues together, trust one another and learn from one another. These relationships remain strong and are delivering results beyond expectations.

Conversations Count

We learned that project failure can be predicted with surprising reliability. That's because the problems requiring the five crucial conversations are widely perceived yet rarely discussed. The best predictor of project success is the quality of these conversations.

Silence exists in organizations because people feel it's not safe to speak up about the problems they see. They shy away from discussions about behavior, expectations or performance because they are afraid of a negative outcome — like making an enemy, enduring a miserable argument or getting canned.

At P&G, we understand that having these five conversations — addressing these human factors — is crucial to the success of our cross-functional initiatives. And based on these findings, we are enhancing our development program for project managers to include early assessment and communication of these key issues. We're also educating senior managers on their role in creating an organizational culture that encourages project managers and team members to "break the silence" and engage in these crucial conversations.

A 31-year Procter & Gamble veteran, Scott is vice president of information and decision solutions. Contact him at scott.rd.1@pg.com.

CRUCIAL CONVERSATIONS

The "Silence Fails" study (*www.silencefails.com*) outlined five key problems in IT projects and five crucial conversations to combat the silence that can lead to failure.

PROBLEM 1 ■ AWOL Sponsors: 65% of project leaders work regularly with sponsors who fail to give the required support, leaving projects stranded and exposed.

■ **Conversation:** Project sponsors must communicate, providing leadership and political support.

PROBLEM 2 ■ Fact-free planning: 85% of project leaders are given parameters such as deliverables, budgets and timelines with no opportunity for input.

■ **Conversation:** Project leaders must be involved in the earliest stages of planning.

PROBLEM 3 ■ Skirting: 83% of project leaders say their effectiveness is undermined by powerful stakeholders and managers who attempt to skirt decision-making, planning and prioritization processes.

■ **Conversation:** Project managers have to stand up and maintain project discipline.

PROBLEM 4 ■ Concealing risk: 50% or more of project managers say team members regularly fail to honestly report project risks. As a result, the team loses opportunities to respond with revised goals, shifted resources or reorganized plans.

■ **Conversation:** Team members must be encouraged to speak up.

PROBLEM 5 ■ Team failures: 80% of project leaders are hobbled by direct reports who don't show up to meetings or fail to meet schedules or goals.

■ **Conversation:** Project leaders must insist on picking their teams, and they must confront inadequate performers.

– ROBERT SCOTT

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Seeing what employees and visitors really had on their laptops, Bert was glad he'd gotten Juniper's Unified Access Control solution.

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(Nobody's Perfect)

The best IT leaders know it and build around their weaknesses.

Q&A

The "myth of the complete leader" goads some managers into a futile effort to be all things to all people. The result can be damaging to the person and the organization, says **Deborah Ancona**, *professor of management at the MIT Sloan School of Management and faculty director of the MIT Leadership Center. In this month's* Harvard Business Review, *Ancona and co-authors Thomas W. Malone, Wanda J. Orlikowski and Peter M. Senge praise the "incomplete leader." Ancona talked with Kathleen Melymuka about how to make peace with your shortcomings and build balance in your organization.*

Why is the complete leader a myth? First of all, no one is omniscient and flawless. No leader can do it all. Furthermore, in this age of very complex problems where information and expertise are very dispersed and change happens very fast, no one can do it alone. You need to rely on other people.

Why is the myth harmful? For several reasons: Trying to do everything can lead to burnout. Trying to live up to some ideal often traps leaders behind a mask of competence, afraid to admit to confusion or to not knowing the answers. But if they don't get input, they can go off course. It can also be harmful because if everybody thinks the leader has all the answers, people don't think for themselves and learn to lead.

You see leadership as a framework of four capabilities. The first is "sensemaking." What's that? Understanding the context in which you are operating. In the IT world, you need to make sense of cutting-edge technology and also what's going on in the business units and at the strategic level, because you want to mesh what you're doing with the business world. You need to understand the culture of the organization in which you are working — what's going on within and outside.

MIT's DEBORAH ANCONA praises "incomplete leaders" who build teams with skills that complement theirs.

Can you give me an example of someone who's good at sensemaking? Andy Grove, former CEO of Intel. He actually wrote a book about really being aware of the external context in which you're operating. Being aware of strategic inflection points — those times when the external environment was going to change radically. He set up the company to monitor conditions that give you cues about radical change.

The next capability is "relating." What's that all about? It's about building solid relationships within and across organizations. In IT, you need to have good relationships with other parts of IT, with the business units, with people outside so you know the latest trends in technology and what other organizations and the competition are doing.

Who's good at relating? Former CEO Herb Kelleher at Southwest Airlines. He once said, "We're not afraid to tell our people we love them, because we do." That may sound corny, but they really believe that. It goes on throughout Southwest.

The third capability is "visioning." Why is that so important? First, it helps to focus an organization's activity. If you know what you're moving toward, you also know what you're not [supposed to be] doing. It also gives people a sense of meaning and excitement about work. It's the switch that provides light and energy.

Can you name a good visionary? The two most famous would be Steve Jobs, who just knows how to frame what he's saying: The Macintosh wasn't about building one more computer but about changing the world. The other is Martin Luther King Jr.: "I have a dream."

What are some of the keys to successfully creating a vision? Part of it is where you start. You need to start with something that really excites you, because excitement is catching. When you feel passionate, people know it, and it transfers. You also have to tap into the desires and values of others. If you're too far off the mark — too far from a dominant cultural value — that can get you in trouble. You need to paint a picture or create a phrase that captures what is possible for the future.

The last capability is "inventing." What's that? Creating new processes and structures to get to the vision. If you're going in a new direction, it may be that the way you're organized is not sufficient, so you need to create a new way.

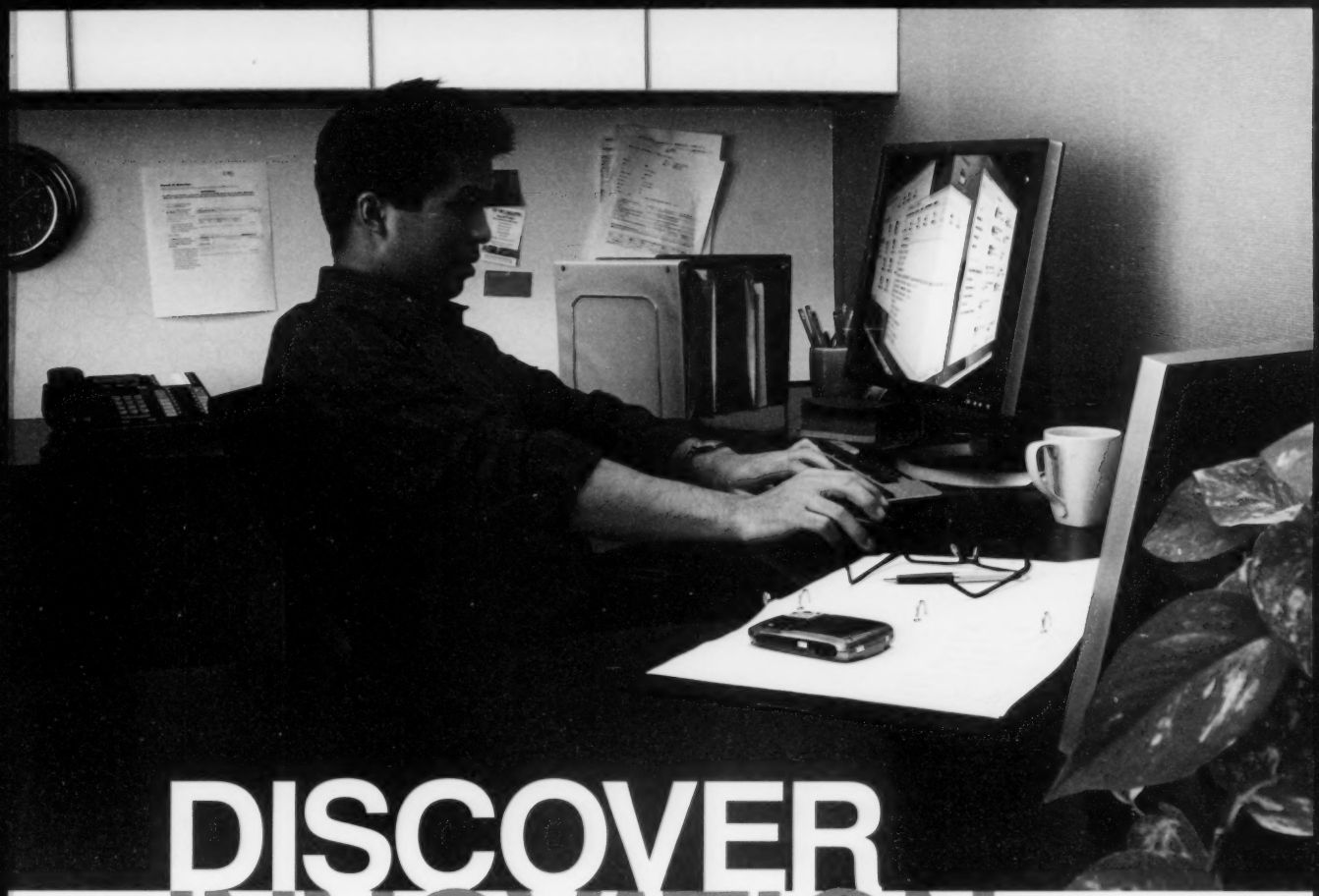
Who's good at inventing? Meg Whitman is an example. The invention that went on at eBay is quite astounding. She invented a way around each problem.

I'm not likely to be equally good at all four capabilities, so as an "incomplete leader," what do I do next? Make sure you know what your strengths are and find out what you can't do so you can find people to work with who complement your skills. Don't surround yourself only with people like you. You need to create balance. ▸

Know YOUR Weaknesses

ADAPTED FROM HARVARD BUSINESS REVIEW

You may be weak in SENSEMAKING if you . . .	You may be weak in RELATING if you . . .	You may be weak in VISIONING if you . . .	You may be weak in INVENTING if you . . .
■ Feel that you are usually right and others are usually wrong.	■ Feel that others constantly let you down.	■ See work as an endless series of crises.	■ Find your organization's vision abstract.
■ Are often blindsided by changes in your organization.	■ Find many of your interactions unpleasant.	■ Have no sense of larger purpose at work.	■ Feel that what you are doing doesn't relate to your company's vision.
■ Resent change.	■ Think that many colleagues are untrustworthy.	■ Think what you're doing may not really matter.	■ Feel that things tend to revert to business as usual.



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Another Impetus For IP Protection

A virus infection points up the dangers of making it all too easy for visitors to get on the company network. By Mathias Thurman

SECURITY MANAGER'S JOURNAL

A VIRUS INCIDENT this week caused me a bit of anxiety about my last big undertaking. But once the infection was under control, it got me thinking about a pending project and the need to get it funded.

My anxiety arose from the timing of the incident: On Monday, we had 65 desktops infected with a variant of a well-known virus. Monday was the first workday after Friday evening, which is when we had installed a Multiprotocol Label Switching (MPLS) network circuit between our company's corporate network and the 200-person remote office of a company that we recently acquired.

The reason my jaw dropped to the floor upon learning about this incident was that I had authorized the MPLS connection. If an infected desktop at the acquired company was the source of this propagation of malicious code, it wouldn't be good for me. Prior to the authorization, I had completed a security assessment, and one of its main purposes was to ensure that after connecting our two offices, we wouldn't become infected by a virus lurking within the acquired company's network. Naturally, I couldn't help but see direct cause and effect in this situation.

Fortunately, the infection was pure coincidence, and we quickly quarantined the infestation. I have a really good incident response process in place to deal with viruses and worms. We were able to conduct some forensics on the virus and then send that information to Trend Micro, which in turn created an interim detection and removal tool for us. The tool was quickly installed on the infected desktops, and we were able to stop the propagation. As standard practice, we also blocked the ability of this variant to communicate with an external Web site by putting the URL on our Web caching gateways, thus preventing any infected resources from trying to "call home."

So, if the MPLS circuit wasn't to blame, what was? The source, we think, was a vendor's laptop. That's the problem I'm going to need more funds to address. And the problem isn't just that rogue laptops can introduce viruses. The problem is that our network is very flat, and visitors who connect to it will find little to stop them from accessing our intellectual property.

We have a policy banning vendor representatives from connecting to our network. But the ban is regularly violated, and until I can get the company to invest in Cisco's Network Admission Control or a similar technology, rogue laptops will continue to be a risk. Eventually, when the network team completes the upgrade of our network, I'll be able to mandate segmentation, with our internal desktop network clearly separated from public areas like conference rooms, which should be authorized for limited Internet access only.

> The problem is that our network is very flat.

I've brought this to the attention of our network manager, who has assured me that the right thing will be done once the routers and switches have been upgraded to accommodate proper network segmentation.

But protecting our intellectual property is a great concern for my company, and I'm always looking for the best ways to do it. We have plenty of brochures, intranet pages and training available aimed at educating our employees on the importance of IP protection. However, those things can take us only so far. There must be a technology complement, and I frequently propose various approaches to the company's division and business unit owners. Though they share my concerns, it all boils down to funding. As is typical with semiconductor companies, my employer is very tight with IT spending.

SO Obvious

One way around that might be to focus on strategic objectives. My company uses SOs to drive bonus plans and set priorities for initiatives. I've noticed that after executives sign off on an SO, it often becomes easier to get funding for things that will help satisfy the SO. And I know that one of our main product divisions — and by far the most profitable — has an SO that's completely focused on the threat of critical design documents and source code leaving the company.

I regularly meet with this group, and I have proposed deploying digital rights management and a content monitor. Right now, I'm putting together my initial production rollout of Microsoft's Rights Management Services (RMS). Although this technology can be incorporated in most Microsoft Office applications and Exchange e-mail, it is limited. It can't protect Adobe PDFs or the applications we use to create design documents and source code. To address those shortcomings, I might consider laying another technology on top of RMS to provide additional functionality. I've been looking at enterprise rights management from Waltham, Mass.-based Liquid Machines to satisfy this requirement.

As for content monitors, they would notify us or take other appropriate action when data that has been identified as sensitive — whether documents, source code or anything containing keywords that we define — is in transit on the network. With content-monitoring tools from any of the major players, including Reconnex, Tablus and Vontu, a centralized management console is used to "register" data into the system, and the sensors watch for either the entire document, parts of it or any network traffic containing certain keywords.

My goal is to leverage the needs of this particular division to satisfy the IP protection needs of the entire company. If I can place sensors at all of our Internet egress points, then I will have the luxury of watching all of our network traffic. And I will be able to use the content-monitoring technology to look for any manner of sensitive information leaving the company, including financial results, strategic plans, legal documentation and human resources data. I'll keep my fingers crossed and hope that this SO will benefit the rest of my company.

WHAT DO YOU THINK?

This week's journal is written by a real security manager, "Mathias Thurman," whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com, or join the discussions in our security blogs: **computerworld.com/blogs/security**.

To find a complete archive of our Security Manager's Journals, go online to **computerworld.com/secjournal**.

SECURITY LOG

Security Bookshelf

Cisco Network Admission Control, Volume II: NAC Deployment and Troubleshooting, by Jazib Frahim, Omar Santos and David White (Cisco Press, 2006). A spectacular follow-up to Volume I, this book dives deep into the configuration and implementation of the core components of Cisco's NAC. The authors cover everything from setting policies on the Cisco Secure Services Client to leveraging the Cisco MARS appliance to receive and correlate alerts.

– MATHIAS THURMAN

More Stolen PCs Put Data at Risk

The theft of computers containing sensitive personal information continues to make headlines. For example, a laptop recently stolen from the Salina Regional Health Center in Kansas contained personally identifiable information, including Social Security numbers and medical histories, on 1,100 patients. Another case involved a desktop PC stolen from Eastern Illinois University in Charleston that contained the SSNs of some 1,400 fraternity and sorority members. In addition, two computers stolen from Vanguard University in Santa Mesa, Calif., contained the SSNs, driver's license numbers and lists of assets of more than 5,000 financial aid applicants. Meanwhile, a laptop The Boeing Co. reported stolen in December was recovered. That case affected about 382,000 current and former Boeing employees. The person responsible for that laptop was fired.

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PAUL GLEN

Why Managers Fail

WHEN I first joined the workforce, I naively believed that workers supported their bosses, looked up to them, followed their directives and sought out their counsel. I also assumed that bosses were generally deserving of respect, since they had been promoted by the sages who went before them. These were the days before Dilbert alerted the pre-career young about the messy realities of the workforce.

Of course, it's easy to lose the confidence and support of subordinates, and, sadly, there are many managers who are deserving of disrespect and derision. One of the reasons why the "Dilbert" comic strip is so funny is that we've all had incompetent and arrogant bosses. There are endless ways for managers to lose the respect of their subordinates, and most do.

PAUL GLEN is the founder of the GeekLeaders.com Web community and the author of the award-winning book *Leading Geeks: How to Manage and Lead People Who Deliver Technology* (Jossey-Bass, 2003). Contact him at **info@paulglen.com**.

Over the years, I've heard explanations for this pervasive failure of leadership that fall into two general schools of thought:

1. Defective people get promoted into management. There are many subtle variations on this theme, but the key idea is that people eventually get promoted to jobs in which they are incompetent. Their unsuitability may be either technical or emotional, but either way, they enter their new position defective and are unable to adapt to the demands of the new job. In fact, it may be their defects that lead them to want those jobs in the first place.

2. The position of management, by its nature, corrupts the competence of those who hold the job. In this narrative, people enter management in a generally capable state, but eventually they succumb to the temptations of money, power, ambition and hubris. The position of management is itself toxic to those who would dare occupy it.

Both explanations make good points, and I'm sure that many managers do fail for these reasons. Still, I get to meet a lot of managers, and most of them are neither incompetent boobs nor power-hungry tyrants. Most really want to do what's best for their organizations and staffs.

So I'm not convinced that either of these stories adequately explains why so many people feel that their managers really stink at their jobs. It seems to me that the most common reasons are more banal and less dramatic. In fact, I think that most managers don't really fall flat at their jobs at all. Most managers perform most of the tasks of leadership with reasonable competence. They generally seem able to carry out their responsibilities. They generally display professionalism and comport themselves appropriately. What seems to go wrong is that each person has some shortcoming in some area — one foible that everyone notices and no one forgives. They don't really fail at their jobs. They fail at one aspect of their job, each one falling short in some idiosyncratic way.

> **"New managers feel compelled to project an air of infallibility, but at the same time, they feel inadequate to the task.**

And once this unforgivable something is recognized and generally acknowledged by the staff, the manager is considered damaged goods — imperfect and unacceptable. From that moment on, the manager is no longer a competent person striving to do the best he can; he is instantly transformed into a caricature of failure. Everything he does going forward is tainted with the verdict of no confidence. And the trust and confidence of the staff, once lost, is nearly impossible to recapture.

Surely there are people who enter management damaged or are damaged by the experience, but to me, what seems most broken is our expectations of managers. Our managers fail because we believe that unless they are nearly perfect, they are failures. Few can live up to expectations of perfection or sustain the ongoing illusion that they live up to expectations.

And since those same staffers who disdain their managers eventually fill management positions, they bring their unrealistic expectations with them into the job, perpetuating the cycle of cynicism and failure. New managers feel compelled to project an air of infallibility, but at the same time, they feel inadequate to the task and incapable of meeting the expectations of their subordinates. This fear and posturing lead their staffs to write them off, just as they wrote off their past managers.

So maybe the reason why so many managers seem so bad is that we judge them so harshly. This should not serve as an excuse for managers to fail to grow, improve their skills and learn from their mistakes. But if we humanize our conception of management and managers, perhaps we'll notice that flawed people can be adequate or perhaps good managers, even with their sometimes annoying, sometimes amusing shortcomings.

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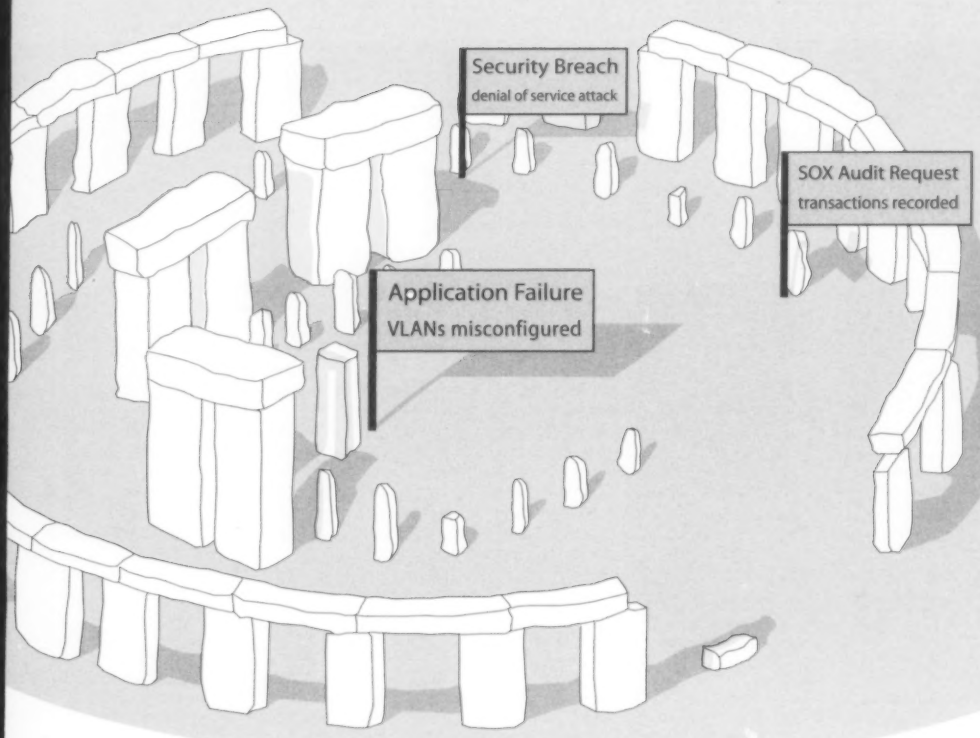

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Editor in chief

Mitch Betts (301) 262-8243
Executive editor

Julia King (610) 532-7599
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SECTION EDITORS

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Mike Bucken (508) 820-8562
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Features editor

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NATIONAL CORRESPONDENTS

Gary Anthes (703) 536-9233

Thomas Hoffman (845) 988-9630

Julia King (610) 532-7599

Robert L. Mitchell (508) 820-8177

Carol Sliwa (508) 628-4731

REPORTERS

Matt Hamblen (508) 820-8567
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Eric Lai (425) 367-4359
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Jaikumar Vijayan (630) 978-8390
Corporate security/privacy issues; related legislation and regulations

Todd R. Weiss (717) 560-5255
General assignment; open-source community; intellectual property; messaging/collaboration

OPINIONS

Mark Hall (503) 391-1158
Editor at large

Frank Hayes (503) 252-0100
Senior news columnist

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Scot Finnie (508) 628-4868
Online editorial director

Sharon Machlis (508) 820-8231
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Ken Mingis (508) 820-8545
Online news editor

Marian Prokop (508) 620-7717
Online editor at large/Mobile & Wireless editor

David Ramel (508) 820-8269
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Johanna Ambrosio (508) 820-8157
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Design director

April O'Connor
Art director

Owen Edwards
Associate art director

ADMINISTRATIVE SUPPORT

Linda Gorgone (508) 820-8176
Office manager

CONTRIBUTING EDITORS

Jamie Eckle (617) 596-1873
Opinions, features

Preston Gralla preston@gralla.com
Networking/Internet

David Haskin dhaskin@earthlink.net
Mobile & Wireless

CONTRIBUTING COLUMNISTS

Michael Gartenberg, Paul Glen, John Halamka, Thornton A. May, Bart Perkins, Virginia Robbins, Bruce A. Stewart

CONTRIBUTING WRITERS

Mary Brandel, Stacy Collett, Russell Kay, Mary K. Pratt, Drew Robb

TELEPHONE/FAX

Main phone number (508) 879-0700
All editors unless otherwise noted below
Main fax number (508) 875-8931
24-hour news tip line (508) 620-7716

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ADOBE SYSTEMS INC. 6, 12, 32
ALADDIN KNOWLEDGE SYSTEMS LTD. 38
ALTIRIS INC. 10
ALTRIA GROUP INC. 10
AMR RESEARCH INC. 24
ARC ADVISORY GROUP INC. 33
ASPECT GROUP INC. 16
AT&T INC. 17
BANNER HEALTH 26
BEA SYSTEMS INC. 37
BEARINGPOINT INC. 22
BMC SOFTWARE INC. 10
BOSCOV'S DEPARTMENT STORE LLC 37
BT GROUP PLC 12
BUSINESS SOFTWARE ALLIANCE 17
CA INC. 6, 8, 16
CENTER FOR SYSTEMS INNOVATION 18
CHICAGO BOARD OF ELECTIONS 37
CISCO SYSTEMS INC. 32, 37
CON-WAY INC. 12
DELL INC. 6
DHL WORLDWIDE NETWORK SA/NV 16
EASTERN ILLINOIS UNIVERSITY 32
EBAY INC. 30
EDWARD D. JONES & CO. 17
FERRIS RESEARCH 37
FLORIDA DEPARTMENT OF HEALTH 16
FORRESTER RESEARCH INC. 22
GARTNER INC. 14, 17, 22, 33, 37
GEMALTO NV 38
GENERAL MOTORS CORP. 12
GENESIS MICROCHIP INC. 8
GERMAN FEDERAL ARMED FORCES 17
HEALTHCARE INFORMATION AND MANAGEMENT SYSTEMS SOCIETY 33
HEWLETT-PACKARD CO. 6, 8, 10, 16, 17, 37
HOLOGIC INC. 6
HYUNDAI INFORMATION SERVICE NORTH AMERICA LLC 22
HYUNDAI MOTOR AMERICA 22
IBM 6, 10, 12, 37
IDC 8, 10, 12
INGERSOLL-RAND CO. 14
INNOWAVE TECHNOLOGY LLC 6
INTEL CORP. 6, 17, 30
INTERNATIONAL NETWORK SERVICES INC. 12
IT SERVICE MANAGEMENT FORUM U.S.A. 16
J.D. EDWARDS & CO. 6
JOHN HANCOCK FINANCIAL SERVICES INC. 18
KENEXA CORP. 24
KORN/FERRY INTERNATIONAL 22
KRONOS INC. 24
LAWSON SOFTWARE INC. 12, 24
LENOVO GROUP LTD. 12, 17
LIQUID MACHINES INC. 32
MARRIOTT INTERNATIONAL INC. 12
MERCEDES-BENZ USA 8
MERCER OLIVER WYMAN 22
METROPOLITAN HEALTH CORP. 14
MICROSOFT CORP. 1, 6, 8, 12, 17, 32, 37
MIT 30
MOHEGAN SUN 22
MSPROJECTEXPERTS 8
MUSTEK LTD. 17
NEW PLAN EXCEL REALTY TRUST INC. 6
NOVARTIS AG 26
NOVELL INC. 17
NUCLEUS RESEARCH INC. 22
OGE ENERGY CORP. 14
ORACLE APPLICATIONS USERS GROUP 6
ORACLE CORP. 6, 10, 14, 24, 37
OREGON HEALTH & SCIENCE UNIVERSITY 24
PENSKE CORP. 10
PSA PEUGEOT CITROËN 17
QUEST INTERNATIONAL USERS GROUP 6
RAYMOND JAMES FINANCIAL INC. 16
RECONNEX INC. 32
RSA SECURITY INC. 38
SABA SOFTWARE INC. 26
SAHARA COMPUTERS PTY. 17
SALESFORCE.COM INC. 14
SALINA REGIONAL HEALTH CENTER 32
SANDISK CORP. 38
SAP AG 10, 17, 26, 37
SERENDIPITY TECHNOLOGIES INC. 10
SIM FOUNDATION 10
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SONY COMPUTER ENTERTAINMENT AMERICA INC. 26
SOUTHWEST AIRLINES CO. 30
SPRINT NEXTEL CORP. 16
SUN MICROSYSTEMS INC. 1, 10, 14, 37
SYMANTEC CORP. 10, 14
TABLUS INC. 32
TERIK COMPUTER SERVICE 37
THE BOEING CO. 32
THE CONCOURS GROUP 28
THE CONFERENCE BOARD INC. 33
THE OPEN GROUP LLC 12
THE PROCTER & GAMBLE CO. 28
TOKYO ELECTRON AMERICA INC. 22
TREND MICRO INC. 32
TRIUMFANT INC. 10
TYCO INTERNATIONAL LTD. 26
UNILEVER GROUP 17
UNIVERSITY OF MIAMI 20
UNIVERSITY OF OKLAHOMA 1
VANGUARD UNIVERSITY 32
VERMONT AGENCY OF HUMAN SERVICES 10
VITALSMARTS LC 28
VONTU INC. 32
WORKFORCELOGIC 26
ZINK IMAGING LLC 10

ADVERTISERS' INDEX

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IBM Software www.ibm.com 21, 23, 25, 27
Juniper Networks www.juniper.net/UAC 29
Kingston Technology www.kingston.com 15
Microsoft Linux microsoft.com/getthefacts 11
Microsoft System Center Designed For Big.com 2-3
Network Instruments NetworkInstruments.com/Time 34
Novell www.novell.com 31
Sharp www.sharpusa.com 9
Testmart www.testmart.com 16/17*

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Continued from page 1

DST Worries

ed an IT staffer to evaluate the use of JRE in all applications and determine which versions are in place.

"There are a thousand things that are going to fall through the cracks," Ebisch said. "Every day, someone brings up a new area we didn't think about that has to be checked, and hopefully there's a patch."

Federal legislation signed into law in August 2005 moved the start of DST from the first Sunday in April to the second one in March and delayed the return of standard time in autumn by a week, to the first Sunday in November. The idea was that shifting the time change by a few weeks could reduce energy use.

Companies with operations in areas affected by the time change will also have to modify their systems to deal with businesses in parts of the U.S. and its territories that don't change to DST, including Hawaii, American Samoa, Guam, Puerto Rico, the U.S. Virgin Islands and much of Arizona.

The time change could also create complications for multinational businesses. In addition, the 2005 law includes provisions that could allow the start of DST to be rolled back to the old schedule, meaning that any changes made this year must be reversible.

Rob Schwartz, manager of technical support at Boscov's Department Store LLC in Reading, Pa., said he and about six staff members began DST remediation work four weeks ago and will look at the issue from every angle. With an assortment of servers running Windows, Linux and IBM's AIX operating system, plus virtual servers, Schwartz estimated that his team will have to dedicate at least 600 hours to completing the DST work.

"It could easily take more than that," he said. "It's not trivial— there's no question about that — so we have to look at every system."

In addition, Schwartz said the IT department at Boscov's had apparently not been keeping up with general software patches as it should have, which is also resulting in more work for him and his staff at the same time the DST issue is coming to a head.

"We really got caught," Schwartz said. "We should have been more proactive."

A Slow Start

Gartner Inc. released a report in mid-January urging companies to take the DST issue seriously. Will Cappelli, who co-wrote the report with two other Gartner analysts, said last week that the DST changes will be a "small to medium problem" for most companies. "It's nowhere near as huge as Y2k potentially could have been," he said. "The severity is not as profound."

Recognition of that fact might explain why many companies have been sluggish about dealing with the time change, Cappelli said, adding that many of Gartner's clients are just now beginning to evaluate their systems.

"We really watched it as a slow trickle starting in late August, starting with many financial services firms," he said. There was a noticeable jump in concern in December, and now efforts to apply fixes appear to be ramping up substantially, Cappelli said.

One common problem, he said, is that many companies are running operating systems that are no longer supported, such as Windows NT 4.0. He noted that those users will have to either "hand-hold" their systems through the DST shift or upgrade to newer operating systems — a step he doesn't recommend at this point.

David Ferris, an analyst at Ferris Research in San Francisco, said the need for DST preparations shouldn't invoke "a panic response" from IT departments. But, he added, the time change needs to be given proper attention, with a full regimen of evaluations, patches and testing before the deadline arrives. ▸

Clock Watching

Gartner says companies addressing the daylight-saving time situation should do the following:

- Review all applications and their interactions with other applications to see if they comply with the DST change.
- Conduct tests after applying patches or manual fixes to verify that the proper times and dates are produced.
- Schedule IT workers to be available when DST takes effect early on March 11 so they can quickly repair any problems that may arise.
- Give the workers who will be on duty well-defined escalation procedures so they can deal with potential issues.
- Check with external service providers to make sure they're patching or modifying their own systems.

Correction

In a story in last week's News section about the Chicago Board of Elections being hit with two lawsuits over the distribution of CD-ROMs containing the Social Security numbers of voters ("Chicago Elections Board Faces Charges Over Breach"), the steps the panel took to fix a separate breach on its Web site were misstated. Users had been able to view, edit and delete the Social Security numbers of voters. But the elections board has removed the numbers from public view and deleted the first five digits of each number from the records stored on its mainframes.

Some Vendors Offer Fixes for Daylight-Saving Time Change

But others haven't said if their apps will be affected

BY TODD R. WEISS

Some major IT vendors have made significant progress in releasing software patches and fixes designed to enable their products to handle the earlier start of daylight-saving time, which takes effect March 11. But others have not made clear how the time change will affect users of their applications.

Microsoft Corp.'s Windows Vista operating system already includes the updated DST rules, but earlier versions of Windows will need to be changed. For Windows XP Service Pack 2, Windows Server 2003 and Windows Server 2003's Service Pack 1, the company will release a combined global time-zone update that will include modifications for the DST change in the U.S.

Earlier versions of Windows, including XP Service Pack 1 and NT 4.0, are no longer supported but can be patched manually using Microsoft's Tzedit.exe utility, which allows administrators to create and edit time-zone entries for the date/time settings in the Windows Control Panel.

Other affected Microsoft products include Windows Mobile, SharePoint Services, Exchange Server, Outlook, BizTalk Server and the Dynamics CRM applications, according to the company. Some patches are available now, and the remainder are scheduled to be released by early March.

A detailed summary of the effects of the DST changes on Microsoft products is available on the company's Web site.

Sun Microsystems Inc. said it is offering free patches for Solaris Versions 8, 9 and 10, but the company will charge a fee for patches for Versions 5, 6 and 7 of the operating system.

Patches will also have to be applied to Java technologies, including the Java Runtime Environment, Sun said. More recent JRE versions already include new time rules designed to handle the DST changes, according to the vendor. Older versions can be replaced with the newer, corrected versions, or systems administrators can download Sun's TZupdater tool to update Versions 1.4 or later of the JRE.

Users of older Solaris releases also have another option: At least one third-party service and support vendor, Terix Computer Service in Sunnyvale, Calif., has announced free software that updates the DST rules in Solaris Versions 5, 6 and 7.

Details about the effect of the DST changes on a wide range of IBM products can be found at a special DST Web site that the company has set up. The IBM Web site also provides information about related issues involving Java, specific information about running IBM products with Windows, and a detailed FAQ on the DST issue.

Some IBM products can be updated now, while other applications will include DST updates in their next regularly scheduled maintenance releases, according to the company.

Both Cisco Systems Inc. and BEA Systems Inc. said they have posted information about their products and the DST change on their Web sites.

Other vendors, including Hewlett-Packard Co., Oracle Corp. and SAP AG, didn't provide more specific information about how their products will be affected by the earlier start of DST. ▸

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FRANK HAYES ■ FRANKLY SPEAKING

Passwords—Why?

AT THE RSA conference this week, smart card vendor Gemalto will be showing a new product: a device the size of a thumb drive that plugs into a USB port and automatically authenticates a user at multiple Web sites. What a great idea, I thought when I heard about it. No special readers, no biometric jiggery-pokery, no flashing numbers for users to copy from a pocket token — just a familiar device for users to plug into a PC. Why didn't somebody think of this before?

Turns out somebody did. Several somebodies, actually, including RSA Security, Aladdin Knowledge Systems and even SanDisk. In fact, the USB security dongle has been on the market since 2003.

Which leads to a new question: Why aren't we using this already?

After all, we know we need better security than passwords give us. We know about the threats from phishing and keylogging. We see the headlines about hacked databases and customer records stolen by the millions. We know our users pick passwords that are easy to remember (and guess) or write them down, or both — and then forget them anyway, so we're constantly doing password resets.

And here's an alternative, one that's simple to use and familiar to users and costs about the same as a password reset. So why are IT shops still fumbling with the clunky, outdated, expensive and weak security of passwords?

Well . . . we know why, don't we?

We know passwords. We've always used them. Our users have always used them. They're far more familiar and ubiquitous than even USB thumb drives.

We know what to do when users forget their passwords. Password resets are the lion's share of what most help desks do; they're fast, they're easy, and they make our trouble-ticket completion statistics look good. And we can do them remotely — we can get a remote user back online in minutes, which isn't possible if a user loses a USB dongle.

We know each password reset costs about $20, but that's a soft cost built into the help desk budget. It's invisible. The price of replacing a lost dongle is unavoidably visible, and we have no way of knowing how many we'll lose. It's an unpredictable, uncontrollable capital cost.

We know that C-level management doesn't have to be sold on passwords. And we know how it would look if we pitched a fancy-shmancy USB key as a replacement for the venerable password: We'd look like a bunch of gadget freaks who just want new little toys to play with.

Yes, we know passwords are weak. We know they're costly and hard to use. We know they fail.

But they're the devil we know. And no matter how much better USB security dongles might be, the inertia of familiarity is tough to overcome.

Maybe it's time to try anyway.

Face it, passwords really are past their time. The risks really are rising. The technology of these hardware authentication keys is no longer geek stuff, and the benefits and costs line up.

Sure, we'll have to teach users to treat USB dongles like their car keys. We can handle that. So can they.

We'll have to develop new procedures for when dongles get lost and work out the logistics of temporary password-only access. And yes, we'll have to watch a steady trickle of dongles disappear until business managers start taking those losses seriously.

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at **frank_hayes@computerworld.com**.

But we need better security, and we need it soon. In the face of phishers and keyloggers, intruders and data thieves, we can no longer afford passwords.

And as nasty a job as it will be to convince upper management of the value of USB security keys, we know how much nastier things will get if we're hit by even a single high-profile security breach.

And we know what those big bosses will be asking when security breaks down:

Why weren't we using something better already? ◗

Just One Bad Idea After Another

IT manager pilot fish at a hospital gets a call from a user at a remote clinic who says their network has gone dead, so he heads off to investigate the outage. "We traced a cable going through a wall," grumbles fish. "No plans, of course. The other side of the wall was several feet away – with no cable. It was the building's elevator shaft, and we realized that the cable was broken inside. Opening the doors while the elevator was at another floor revealed two loose ends of Cat 5 cable. I guess someone thought the elevator shaft would be a good way to go from floor to floor, but the moving elevator had other ideas."

SHARK TANK

Bright Guy

User calls help desk pilot fish to report that the printer in the hallway has no power. Is it turned on and plugged in? fish asks. User tells him, "The switch is on, but I can't see if the cord is plugged in." When fish arrives to investigate, it's clear why: All the lights are out, and two maintenance guys with a flashlight are looking for a blown fuse in the power panel. Maybe the lights all being out would indicate why the printer doesn't have power, fish tells user. "Hmm," says user. "I figured it just came unplugged, but it was too dark to see, and the maintenance guys wouldn't let me borrow the flashlight."

Numbers Game

It's the mid-1990s, and this proprietary minicomputer is being upgraded to one that uses a TCP/IP network. "Not being used to TCP/IP, the operators asked me to test the ability to connect to the system via Telnet," says a pilot fish helping out. Telnet connects, but fish can't log in. One hour and many support calls later, fish finally talks to a vendor support guy who asks what type of terminal emulation he's using. "When I told him, he informed me that emulation was not supported," says fish. "I told him that according to the vendor's own Telnet documentation, it was. He asked what version of the documentation I was using. I said, 'Version 2.' He said, 'Oh. I still have Version 0.' "

It Won't Help

E-mail from central IT to user at a remote site: "We'd like to move your new mail server to your office sometime soon, but it will have to be over a weekend. You won't have access to e-mail while the server is in transit." User: "Can't we put a wireless card in the server while it's in transit?"

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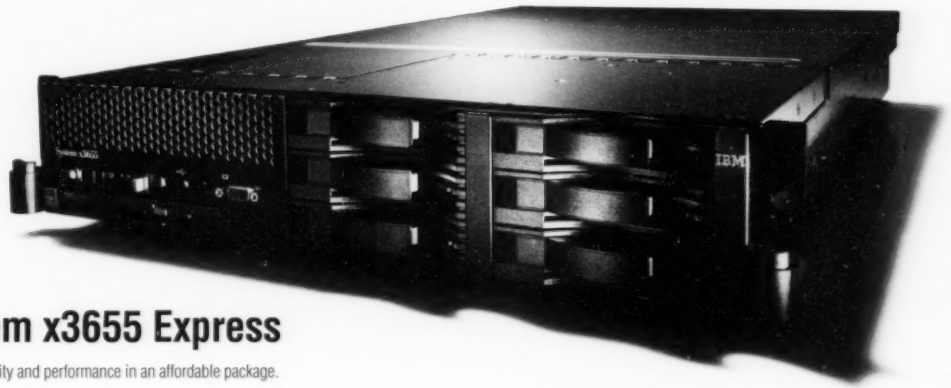

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